

CALIFORNIA STATE JOURNAL OF MEDICINE

DIVISION OF FEES VS. "FEE SPLITTING"



NOTHER matter that is adding to the dissatisfaction of the public with the costs of medicine is the unfortunate, systematic, well-financed campaign of publicity that has for some time been carried on in the public press against so-called "fee splitting." Actual splitting of a fee earned by one physician with another who has not earned it is, of course, unethical and dishonest. Commissions, rebates or similar practices under any other name are also reprehensible and dishonest. The equitable division or apportionment of a reasonable fee between two or more physicians who have rendered service to any patient always has been, and is, both ethical and honest if done with the patient's knowledge and is specially provided for in the Principles of Medical Ethics of the American Medical Association. The unfortunate and misleading character of the propaganda referred to is due to the fact that by indirection and in some instances specifically, "fee splitting" is made to include both the honest and dishonest methods of division of fees. It will be curious to see how long a complacent medical profession will permit this farce to be perpetrated from the public platform and the public press in its name.

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No. 2

The weight of evidence, I believe, is against the theory that toxins of intestinal origin or from focal infections are the cause of hypertension, although they are apparently often temporary exciting factors. Hypertension is too regular and constant in its setting and course, and is too exclusively present in a type of individuals who indeed are remarkably free from ordinary infections and from intestinal stasis to permit of these toxin factors being regarded as the chief cause. It is also too constantly absent in some other types who are markedly susceptible to ordinary infections and among whom also intestinal stasis is almost the rule, and who also may over-eat with impunity.

as far as any danger from hypertension or chronic nephritis is concerned.

We have not found intestinal stasis a marked characteristic of these cases as we have observed the rapidity of their intestinal drainage with the X-ray following the ingestion of barium and paraffine pills. In fact, many of them show a more rapid elimination than the average person. I might mention that the method we follow in the study of intestinal stasis consists in giving on alternate days a half dozen or more various sized pills made of barium and paraffine and prepared so that at body temperature they are of the consistency of soft wax. We then make daily fluoroscopic observations and note the location of the barium in the intestinal tract. This method is chosen instead of simply mixing free barium with the food, because but little barium is required and we thus eliminate any possible chemical or mechanical influence on the bowels by the barium.

It is said of Lincoln that he kept on his desk a large, heavy envelope in which he placed miscellaneous odds and ends, and written across the front was the legend, "If you can't find it anywhere else look in here." Absorption of poisons from hidden infected areas is most certainly an important fact, yet it is possible that we are making too much of an etiological catch-all of the term, "focal infection" and that we consign to its convenient folds many questions worthy of a more careful and studied answer. At any rate I am fully persuaded that many hypertension cases have been deprived of some probably useless though quite harmless tonsils, but more unfortunately also some very useful teeth. Any surgery of the mouth or throat that will interfere with eating for a time may relieve hypertension regardless of infection. I recall very well a hypertension case under my observation a number of years ago. His teeth were indicted and convicted and all pulled. His pressure soon dropped to near normal and we were pleased. Furthermore it stayed low as long as the only diet possible was milk, fruit juice and soup. But on acquiring new teeth and a dexterity in using them (so that the patient could return to his former diet) the blood pressure returned to its former level. It was doubtless the restricted and alkalinizing diet that deserved the credit for the temporary reduction in pressure rather than the elimination of any focal infection.

Principles of Treatment—Assuming that hypertension is a malmetabolic condition, naturally one would conclude that its treatment should concern itself chiefly with those things which are more especially involved in metabolic processes, namely: muscular activity and rest, alimentation and the endocrine functions.

Exercise and Rest—If is a significant thing that high blood pressure is seldom found among field laborers and others who perform work regularly requiring vigorous muscular effort. Muscular activity is the natural stimulus to normal metabolic processes and the decree saying that "in the sweat of thy face shalt thou eat bread," may well be regarded as a law of life, and the man who eats bread and then does his sweating in a Turkish

bath is not fulfilling its conditions. Exercises that are general, moderate and free, with proper periods of rest are certainly beneficial in hypertension, but of course, these must be prescribed with due regard to the overtaxed myocardium. Moderate muscle strain is good but nerve strain is not good. Rest of mind is more important than rest of body. Therefore, the hyperpietic should plan so as to live a life of physical activity but of mental tranquillity.

Alimentation—No line of treatment have we found to yield such satisfactory and uniform results as that dealing with alimentation. In a large number of patients it was the only treatment and was carried out with the patient at his regular duties. In their dietetic management we have for a number of years been governed by the following principles:

1. The patient's caloric intake is determined by his ability properly to metabolize it.
2. The protein is not too greatly decreased.
3. The diet includes an abundance of the so-called protective foods.

Caloric Intake—If metabolism is faulty or difficult, care taken to introduce into the system only that amount of food actually needed to maintain the body, and for a short time even a slightly less amount can surely be only a reasonable procedure. We weigh our patients carefully and reduce their calories until they lose, say a pound or more in weight. As these patients are usually stout there is a distinct advantage in reducing their avoirdupois. It is surprising to what a low point the diet must be reduced before some of these patients will begin to lose—1200 or even 1000 calories in some cases. If they are not overweight we permit only the slight reduction necessary for us to find their maintenance diet. In choosing fats preference is given to cream, olives and walnuts. Carbohydrates may be chosen from most any source, those of fruits and vegetables being the best. Many of these patients are great bread eaters, and a decided reduction in the amount eaten even to the point of eliminating it entirely for a time has been found an advantage.

Protein Reduction—It is safe to suppose that if there is to be a decrease in the total amount of food, the decrease better be in the purely oxidizable foods, fats, starches and sugars of which the body usually has a stock in reserve, and not in protein, the tissue building food, a reserve supply of which the body never carries. Not only does protein enter into the formation of tissue, but it also is essential to the normal metabolism of starch and fats. It must therefore enter regularly and sufficiently into the daily ration. Protein eaten yesterday does not suffice for today, as the body has no way of storing this food element. I believe that the excessively low protein diet for these patients is a mistake. Our experience practically confirms me in the belief that the more liberal allowance of protein is not only permissible but desirable. I have not seen a patient whose pressure was reduced by simply cutting down on the allowance of protein. With many of our patients we have actually increased it beyond what they had pre-

viously been taking. That no unnecessary burden be added in the way of excessive protein waste preference is given to the foods yielding the complete proteins as milk, eggs, and leafy vegetables. In every case whether by cutting down the energy food or increasing the protein we increase the ratio of protein to energy food.

Protective Foods—It is very essential that the diet of these individuals contain an abundance of the so-called protective foods, chiefly fruits and vegetables, to insure an abundance of alkaline and other mineral salts as well as vitamins. If the assumption that hypertension is a metabolic disease is true, this is important because of the part these play in normal metabolic processes. The giving of chemically pure and artificial preparations of these salts we have not found satisfactory. In order to get satisfactory results instruction must be specific and adapted to the needs and conveniences of each patient. We usually make out a daily program to be followed strictly until modified. This is changed every week for variety if for no other reason. The patient is kept on this strict regimen until he becomes intelligent as to his particular dietetic limitations and his optimum diet.

There is a distinct advantage in knowing what the diet has been before the special program is begun. I ask for a daily detailed list of all foods eaten during two or three sample days, and am always optimistic as to the dietetic possibilities in a patient whose diet has been something after this order: Breakfast—coffee, buttered toast, bacon, eggs; Lunch—bread and butter, tea, cookies, and the usual dinner with its preponderance of rich gravies, salad dressings, bread and butter and desserts, and its dearth of protective foods, (milk and leafy vegetables). For in the great majority of these cases a diet restricted in carbohydrate and fat, relatively high in protein and liberal in alkalizing fruits and vegetables will bring most satisfactory results. The following brief case report may be taken as an example of the usual detailed dietetic plan we have followed. Of course, it should be said that the program is made to fit each individual case and no two patients are treated exactly alike.

CASE REPORT

Mrs. C., age 60, well-to-do housewife, came January 25, complaining of repeated attacks of partial paralysis and peculiar sensations in her right leg. Also dizziness and shortness of breath. Her previous history revealed nothing particularly remarkable. Sedentary habits for years, never constipated, digestion always good. Ctma quite normal. Examination revealed an over-stout woman of the normal habitus—five feet tall and weighing 176 pounds. Lungs negative, heart slightly enlarged, first sound diminished in duration and intensity. A₂ accentuated. No murmurs. Abdomen fat and pendulous. Reflexes active, especially on right side. Blood pressure 210-120. Urine negative except for an occasional hyaline cast. Blood examination, including chemistry, showed no deviation from the normal worth mentioning. Basal metabolism was minus 15. Her customary diet was: Breakfast—mush and cream, buttered toast, coffee with cream and sugar; luncheon, bread and butter, stewed fruit, doughnuts or cookies, tea; dinner, meat, potatoes and gravy, bread and butter, vegetables, pie or cake aggregating

about 2000 calories in all, with 150 to 200 calories of it protein.

The following diet list was given January 26: Breakfast—one glass orange juice, two eggs, one slice toast (no butter). 10 a. m., one cup hot vegetable broth. Dinner (at noon)—baked potato, butter, ordinary serving, raw vegetables—freely, cooked leafy vegetable (liberal but prepared without fat), choice of any one of: (1) cottage cheese—two tablespoonfuls, (2) one or two glasses skimmed milk or buttermilk, (3) small serving (2 ozs.) lean meat. 4 p. m., vegetable broth. Supper—Grapefruit (¼) with honey, skimmed milk (one glass).

This ration totals 1100 to 1200 calories and 200 to 250 calories of it are protein. In this way the proportion of protein to energy food was greatly increased. This we believe to be a very important point. No other treatment was given this patient except a half grain of desiccated thyroids, three times a day. How much this influenced the case I don't know as other similar patients seemed to do just as well without it. At the end of a week she felt much better, her blood pressure was 190-110 and she had lost 2½ pounds. She was quite pleased with herself and the diet, so no change was made. She continued to lose two or three pounds weekly until her weight became 150, and her blood pressure was 152 systolic and 95 diastolic. Her diet was increased to a maintenance level with her weight at 150 pounds and her pressure remains below 150 systolic and 100 diastolic at all times. Her symptoms have disappeared and she feels better and stronger every way.

Simple starvation without an intelligent regard to the dietetic principles involved may be dangerous because of the development of a condition of acidosis and other untoward complications. I recall very well a patient whom I first saw several years ago. For six weeks she had been on a diet for high blood pressure. On inquiry I found that she had been getting between six and eight hundred calories daily derived from a diet the main part of which was toast and prunes. She had a severe headache, was nervous, restless and felt utterly exhausted, and her blood pressure was still 270 as it had been previously. Practically the only change made in her program was to change her diet. In this we took away her prunes and toast and gave her a variety of nitrogenous foods, yielding approximately 250 calories of protein. Besides this, she was given enough of the alkalizing foods to bring her total calories to 1200 daily, and she not only began to feel better immediately, but within a few days her pressure had dropped to 170. Her calories were increased to the maintenance level of about 1500, as I remember, and with slight variations her blood pressure continued between 160 and 170 for the several years following that she was under my observation. Experience has taught us that with some of these patients who have had an excessively high pressure for a considerable length of time it is not wise to try to force their pressure too low, as they seem to do better with it at a moderately high level.

Other therapeutic measures employed among many of these patients were short tonic hydrotherapeutic procedures and general petrissage for the purpose of stimulating metabolism. Corpus luteum was given to women at the menopause and proved unquestionably to be of benefit. Thyroid

was given to many, simply on theory of low basal metabolism, but we failed to see much marked results as followed the use of corpus luteum in certain cases. With a few of the cases we have used some of the various electrical modalities and I would pronounce them good but not good for much. The nitrates we hardly used at all.

In the great majority of patients who had not already shown evidence of a serious kidney or myocardial lesion, the pressure was markedly reduced, and the general condition improved. And patients observed months afterward who had kept reasonably close to the prescribed diet still presented a satisfactory blood pressure.

In the absence of complications, all over-stout patients, and women at the climacteric responded the most readily and satisfactorily to treatment. The thin arteriosclerotics and those red skinny men whose very appearance suggested a small red kidney were the most difficult to treat and responded the least satisfactorily.

Yaws Reported in California—A letter from Harry E. Alderson of the faculty of Stanford Medical School reports a case of yaws. If there is one case in California there probably are others, and if this disease—new to this State—is to be properly studied and promptly eradicated, it would be advisable for physicians everywhere to make notations of all possible cases of yaws. The Journal would appreciate a report to this office regarding the prevalence of this disease in any part of this State. If possible, the report should show where the disease was contracted, the nationality of patient, character of lesions, if a Wassermann test was made, if examinations were made for spirochetes, how the diagnosis was established, what was the treatment and the results of the treatment.

In an editorial discussion of yaws in the United States, the Journal of the American Medical Association (December 22, 1922), says in part:

"The fact that, in a country as near to the United States as is Santo Domingo, a disease may be sufficiently prevalent to permit observers to report a study of more than a thousand cases, with an incidence of from one hundred to three hundred each day, whereas the discovery of a single case of the same malady in this country excites evident interest among scientific clinicians because of its rarity, furnishes food for reflection. Despite its great prevalence in certain parts of the West Indies, American dermatologists seem to be agreed that yaws is rare in the United States. This conclusion is justified by the recent review of Fox, in consultation with many American colleagues, of recorded instances in the literature. Yaws often simulates syphilis, both clinically and pathologically. The etiologic micro-organisms can be distinguished only by skilful technic in the hands of trained workers. Yaws, however, is a much less serious disease, as it does not attack the central nervous system or viscera and is not transmitted by heredity. Furthermore, it is much more easily eradicated by arsphenamin than is syphilis. It might be supposed that, because of the resemblances between syphilis and yaws, the latter has often escaped recognition as such and has been falsely diagnosed. This seems unlikely to Fox, in view of the large number of well trained dermatologists scattered over different sections of the United States. He ventures the belief, therefore, that yaws would probably not thrive in the northern part of this country, as it is strictly a tropical disease. The majority of the cases reported in northern seaports have evidently been imported from foreign countries. Why climate should be the decisive factor is not easy to conjecture.

ASSOCIATED SYPHILIS AND TUBERCULOSIS*

MORE PARTICULARLY AS THEY AFFECT THE LUNGS

By A. L. BRAMKAMP, M. D.

The literature upon this subject is considerable in amount and covers a long period of time. Increasing knowledge and the newer methods of diagnosis and treatment, however, have thrown new light on these diseases and on their association and, therefore, make timely and useful renewed consideration of this always important field of medicine.

How commonly do syphilis and tuberculosis occur together in the same subject? It will be advisable first to consider the incidence of each disease alone. As to the prevalence of syphilis, statistics vary widely with the source. In seven hundred autopsies performed by Thompson for the coroner of St. Louis, two-thirds of all adult cases showed gross lesions of syphilis. This material is representative of the underworld. Warthin (quoted by Thompson) in routine autopsies at Ann Arbor found syphilis present in one-third of all adult cases, the material being drawn from rather well-to-do people, largely of rural communities. However, Pusey, after consideration of much data from numerous sources, concludes that in the United States, at a very conservative estimate, syphilis affects more than 5 per cent of adult males and more than 1 per cent of females, or more than 3 per cent of the entire adult population. As Warthin's 33 1-3 per cent, or one in three, is certainly too high, so Pusey's 3 per cent is probably low, particularly if congenital syphilis is included. We may believe, then, that there are between three and five million syphilitics in the United States.

With regard to the tubercle bacillus, infection, it is agreed, is practically universal by the time early adult life is reached.

If syphilis really plays a part in converting tuberculosis infection into active tuberculosis disease, every syphilitic would be potentially consumptive, using that term in a broad, loose sense.

While tuberculosis infection is so general, it is estimated that, as a matter of fact, less than 10 per cent ever become subjects of recognizable clinical tuberculosis. Still, one in every eight deaths is attributed to tuberculosis and some, no doubt, escape record.

Attention is called to the great prevalence of these two diseases to emphasize the fact that their co-existence in the same individual must be very frequent.

For the purpose of our particular inquiry, associated syphilis and tuberculosis of the lung, it is necessary to consider the frequency with which syphilis alone affects that organ.

Syphilis of the lung has been considered a rare disease, as the following variously quoted data show:

Osler reports twelve cases in 2500 autopsies.

* Read before the fifty-first annual convention of the Medical Society of the State of California, Yosemite Valley, May, 1922.

Fowler found only twelve specimens in all the London museums.

At Copenhagen, out of 6000 cases of syphilis only two cases of syphilis of the lung were observed clinically; but it is noteworthy that out of eighteen cases of acquired syphilis that came to autopsy, three had gummatous lesions of the lungs, and gumma of the lung is more rare even than sclerosis.

Chiari, in the extensive material afforded at Prague, found only two cases of syphilis lesion of the trachea and one of the lung.

Peterson, in eighty-eight autopsies of patients with acquired syphilis, found lung lesions in eleven.

At the Massachusetts General Hospital one case of syphilitic pneumonia with cavity formation was found.

Out of 4880 autopsies which showed lesions of syphilis, Symmers found the lungs involved in twelve.

Thompson found three cases of typically syphilitic lung lesion in 470 syphilitic subjects.

Combined, there are here recorded autopsies on 5456 syphilitics, with syphilitic lesions of the lungs in twenty-nine, or one in 198. There is real reason, however, to question whether these figures represent the facts; first, because the usual lesion of syphilis of the lung, sclerosis, possesses nothing characteristic, but resembles sclerosis from other causes; in particular, that of tuberculosis and cases are, therefore, not recognized; and second, because there is probability that the lung may be the seat of such infestation by the spirochete and of such microscopic pathology as Warthin has found in the heart, the spleen and the pancreas. If such work has been done with the lung, it has escaped my notice.

Vedder quotes Brook as follows: "In South Africa when tuberculosis was unknown and syphilis was prevalent, 35 per cent of all natives had fibroid conditions of the lungs."

Clinically, also, the diagnosis of pulmonary syphilis is beset with like difficulties, there being no symptoms or physical signs that are pathognomic of the disease. The diagnosis must be largely by exclusion and without doubt many cases are unrecognized, most of them being called tuberculosis.

To establish a clinical diagnosis of syphilis of the lung, the sputum must be negative to repeated, properly made tests for the tubercle bacillus or other organisms that may produce lesions of a similar nature; other evidences of syphilis must be present as bone lesions, keratitis and, particularly, because so common, syphilitic orchitis that causes an atrophy and a hardening of the testicle; the Wassermann test must be positive. It is claimed by some (as Fishberg) that tuberculosis may sometimes cause a positive Wassermann, so that the test must be plainly positive and persistent. Moreover, the positive Wassermann does exclude other disease.

The therapeutic test gives most help in diagnosis of lung syphilis, for the beneficial results of anti-syphilitic treatment of this lesion, properly given, are so usual, so prompt and so marked as to

leave no question. Fishberg well says: "The efficiency of the therapeutic test does not imply that, in the least suspicious case, a diagnosis of syphilis of the lung should be made and treatment applied."

The following abbreviated case record illustrates some of the difficulties of diagnosis:

Patient B, railroad clerk, 56 years of age, but old looking, referred to Banning Sanatorium because of severe repeated pulmonary hemorrhages, supposed to be tuberculosis. Had extensive consolidation of right lung, slight fever, cough. However, general condition was good and sputum scant; no tubercle bacilli found; Wassermann three plus. X-ray showed dense clouding of whole right side, permitting no differentiation in lung or outlining of vessels. Diagnosis of aneurysm of aorta was made, confirmed by autopsy; the clouding in the X-ray being due to hemorrhage into the lung.

In this connection the experience of Wright at the Government Sanatorium for the Tuberculous at Fort Bayard, New Mexico, is very suggestive. He used succinimide of mercury, increasing the dose gradually until the limits of toleration were reached. He reported an extraordinary proportion of recoveries, and on the basis of this experience recommended mercury as an effective remedy for tuberculosis. The method was extensively tested and proved disappointing, failing not only to do good, but often actually doing harm. Wright was evidently treating syphilis of the lung, alone or most often in combination with tuberculosis, in a material especially rich in this association. This work was done before the employment of the Wassermann test and this means of control was therefore lacking.

A clinical case of the associated diseases, showing a common picture, is the following:

R. S., 54, salesman, with symptoms and signs warranting diagnosis of tuberculosis of right upper lobe; also extensive tuberculous ulceration of larynx, tubercle bacilli in sputum rather numerous, Wassermann 4 plus, no manifestations of syphilis. Laryngeal lesions healed completely under tuberculin and local treatments. Later developed superficial tuberculous ulceration of the pharynx and died badly. Fearing that syphilis might, after all, be exerting an occult harmful influence, mercury was cautiously administered but with no benefit, and patient died of tuberculosis.

A helpful sidelight on the frequency of the two diseases in association is afforded by the figures on the occurrence of a positive Wassermann reaction in cases definitely tuberculous, but here, too, there is disconcerting variation, ranging from 5 per cent to 70 per cent, and an individual's own figures may show wide differences from year to year. Thus von Adelung's material in 1914 gave 23.5 per cent; in 1915, 7.6 per cent; in 1916, 3.2 per cent; in 1917, 6.2 per cent, an average of 8.7 per cent in 195 cases. Shortle found the Wassermann test positive in 10 per cent of a series of his cases of pulmonary tuberculosis. In 6324 cases from various sources the coincidence of the two diseases as shown by the positive Wassermann averaged 17.81 per cent.

In view of such data as has been presented, there is good reason to believe, with Landis and Norris, Carter and numerous other authors, that gross syphilis disease of the lung is not so rare as has

been thought and, if the spirochete behaves toward the lung as it does toward other tissues, its association with the tubercle bacillus in the lung must be relatively common.

Syphilis as a cause of lowered local resistance in the lung is a possible but probably unusual factor in the development of tuberculosis.

"As to the effect of the association, it would be quite natural to suppose that this would be disastrous, but, strangely enough, opinions on this point seem conflicting. There are some who believe that syphilis exerts a retarding and in some cases even a curative influence over the tuberculosis, while others hold that tuberculosis is distinctly aggravated by its association with lues. Cases sustaining both contentions are to be found in the literature."

Fishberg says: "Syphilis, while not antagonistic to the development of phthisis, yet influences the latter so that it runs a mild course showing strong tendencies to fibrosis," having reference here to syphilis in its later stages.

Carter, on the contrary, finds: "The bulk of opinion is that coexistence of the two infections renders prognosis more grave." Landis and Norris believe that the course of the tuberculosis does not differ from that occurring in non-syphilitic individuals.

The explanation of the difference of opinion seems to lie here, that there are varying factors in different cases, the effect of syphilis upon tuberculosis being dependent largely on the stage and degree of activity of each disease and the condition of general health or "the resistance" of the individual at the time.

Our own opinion is that syphilis, on the whole, plays a minor role in the joined infection. We have not observed, as a rule, any effect of old syphilis, good or bad, on the course of pulmonary tuberculosis. While it is not uncommon for tuberculous subjects to have a positive Wassermann test, such cases run the usual course uninfluenced, unless the lues takes on an active form and becomes, as it does occasionally, a direct factor in the local pathology or affects the general health.

Occasionally an individual with early tuberculosis, whose condition is still good, for some unexplained reason will continue to do well or even better after acquiring syphilis. Quite generally, however, when the two diseases occur in the same individual in acute form, early syphilis and active tuberculosis, the course of both is likely to be aggravated and the outcome to be disastrous.

We have now to consider the question of treatment of the conjoined diseases.

That the older methods of treatment of syphilis with mercury and iodides, injudiciously applied, are capable of doing serious harm in the presence of coexisting tuberculosis was and is generally recognized. The fact was made especially clear when Wright's method was being tried out following its promulgation in 1908. The need of extreme caution in the use of mercury was emphasized and the same is to be said of the iodides, the field of usefulness of the latter being still more

limited as to pulmonary syphilis alone or combined with tuberculosis.

The advent of salvarsan was therefore received with high hope by those having to treat associated syphilis and tuberculosis; its use was instituted with enthusiasm and many glowing reports have been recorded. It was considered a safe and adequate substitute for mercury.

However, time enough has elapsed and experience has accumulated to compel a revision of these early optimistic conclusions.

Time and again Cabot, in the Massachusetts General reports, has called attention to the damage salvarsan may cause, particularly in the liver, and Richardson, the pathologist in the same institution, lately calls salvarsan "a two-edged sword." From other quarters also have come numerous and emphatic notes of warning.

Of the effects of salvarsan as an activator of latent, quiescent or arrested tuberculosis and as a stimulant to increased activity in developed pulmonary tuberculosis, the following data are illustrative: Elliott—Three cases of uncomplicated syphilis of the lung responded beautifully to treatment; in seven cases of arrested tuberculosis the disease was caused to light up again; in one case of quiescent tuberculosis of the knee joint, the disease was so aggravated as to compel amputation; in one case of lupus there was a marked local reaction; the final result was not stated.

Herxheimer and Altman report four cases of surgical or pulmonary tuberculosis in which aggravation of the process occurred under salvarsan. Vivian expresses his opinion as follows: "To continue to administer arsphenamine to a patient with tuberculosis is frequently criminal. The size of the dose, the interval of administration, do not materially alter the result; neither does the stage of the tuberculosis nor the extent of the disease. This conclusion has been reached after having seen literally dozens of such cases die of a rapid tuberculosis following the administration of arsphenamine. . . . Arsphenamine, in some undetermined manner, produces a decidedly deleterious effect upon the lung of a syphilitic who has tuberculosis and will cause his death if continued." This view seems perhaps extreme, but it puts emphasis where emphasis is needed.

A case in point that came under our own observation and a type of others is the following:

H., aged 40, tuberculosis of larynx and lungs; Wasserman 4 plus, had sanatorium treatment for about a year and left in excellent condition with disease arrested. Went to Colorado, where he continued the cure and remaining well for four months and until he was given salvarsan to eradicate syphilis when he promptly relapsed and, on his return, nine months after leaving Banning, he had extensive active tuberculosis of larynx, both lungs, and anus, continued to grow worse and died.

It is agreed that the most effective treatment of syphilis now available is the combined treatment with mercury and salvarsan; that each has particular advantages and some special indications, but that neither alone is adequate.

The tuberculous individual with syphilis cannot be treated most satisfactorily by the use of one of

these remedies alone if the object aimed at is the elimination of the spirochete and the attainment of a negative Wassermann. However, the end to be sought in these complicated cases is not a cure of the syphilis. Not every tuberculous patient with a positive Wassermann or even with some clinical evidences of syphilis should be mildly or vigorously treated for syphilis. The tuberculous phase is the one to receive first consideration. Anti-syphilitic treatment is indicated only when syphilis seems to be the predominating factor or when it is exercising a sufficiently harmful influence as to render less favorable the course of the tuberculosis.

In any case the remedy or remedies employed should be selected to fit the conditions existing, applied in such dosage and at such intervals and for such periods of time as are found to produce an abeyance of the syphilitic factor, with care at the same time to avoid aggravating the tuberculosis. In this way, usually very satisfactory results will be secured.

The more active and the more advanced the tuberculous process, the greater is the caution necessary to be observed in pushing anti-syphilitic treatment, but it is not to be forgotten that latent, arrested and quiescent tuberculosis may be fired up by injudicious treatment, with mercury, arsphenamine or both, and that such untoward effect may not become apparent at once, but its appearance may be delayed for weeks or months.

CONCLUSION

Syphilis of the lung is less rare than has been thought.

Syphilis and tuberculosis are also more often associated in chronic fibroid lesions of the lung than is generally recognized.

The effect of the association of syphilis with tuberculosis in the lung varies, depending largely on the stage and the degree of activity of each.

Anti-syphilitic treatment is indicated only when there is reason to believe, first, that syphilis is directly affecting the general health of the patient or is producing dangerous local lesions; or second, when the two processes are associated in the lung and the usual methods of treatment for tuberculosis fail to bring about satisfactory improvement.

Treatment of associated syphilis and tuberculosis must be individualized and carried out with due caution as to remedy selected, dose, interval and duration of treatment. Mercury, arsphenamine and iodides are all capable of great good as well as of great harm, immediate or late. Mercury is probably less dangerous than the arsenical.

California Schools and Optometry—The Optical Journal and Review of Optometry of December 14, 1922, in a leading editorial discusses the relation of optometry to the schools and in part says:

Optometry has taken another step forward, by securing official recognition in public schools. The California law authorizes local boards of education to engage optometry inspectors on the same basis as physicians and dentists have been commonly employed. A start has been made in Los Angeles, where two optometrists are now employed to look after the refraction of the eyes of the children in the schools. . . .

A CASE OF BILATERAL MALIGNANCY OF THE TESTES*

By CHESTER O. TANNER, M. D., San Diego, Cal.

I recently reported a series of one hundred cases of tumor of the testicle, all of which were unilateral. From a study of this series and from the literature, the conclusion seems warranted that bilateral malignancy of the testicle is extremely rare. Such a case has recently been seen, and on account of its rarity is reported.

CASE REPORT

C. D. B., age 45 years, was first seen by J. P. Lewis, April 12, 1922. Six months previously the patient had noticed a slight swelling in his right testicle, accompanied by some pain. He was not certain of any trauma to the part. The swelling gradually increased in size for three months, at which time a small lump was noticed in the left testicle. Both testicles now enlarged very rapidly in size. Six weeks later the skin over a portion of the right scrotum became red and inflamed. Two weeks after that a large area of skin surface became gangrenous. At this time—about four weeks prior to admission to the hospital—the patient became very septic, began to lose weight rapidly, and was delirious at times.

On admission he was very septic and extremely emaciated. The temperature was 102 and the pulse 140. The chest showed evidence of old fractured ribs. The abdomen was negative. There were no tenderness or masses in the abdomen or inguinal regions. The pupils were normal and the reflexes were active. The Wassermann reaction was negative. In the right scrotum, which was gangrenous over an area 10 cm. in diameter, was a large oval-shaped mass 15 x 10 cm. in size. The scrotal skin was tightly adherent to the mass. The vas could be palpated at the back. The left scrotum contained a mass 12 x 8 cm. in size. The skin on this side was everywhere freely movable over the mass. The upper portion was fluctuant and translucent, and extended up to the external ring. The vas and epididymis could be made out. The seminal vesicles were negative.

Operation. April 12, 1922—Double orchidectomy with removal of almost the entire scrotum. The more radical operation could not have been done on account of the patient's condition. The gross specimens were large oval-shaped, very firm, encapsulated tumors of the testes, the right 15 x 10 cm. in size and weighing 1100 grams, and the left 12 x 8 cm. in size and weighing 700 grams, with an accompanying hydrocele on the left side. The epididymis could be made out on the left side. Cut surfaces showed soft homogeneous pink-colored tissue with numerous whitish-colored areas of necrosis. No testicular tissue was made out.

Microscopic sections show solid masses of polyhedral and rounded cells of varying sizes, containing relatively large nuclei and one or more prominent nucleoli. Numerous mitoses are present.

Diagnosis—Carcinomatous type of teratoma testis. **Subsequent History**—May 1, 1922, retroperitoneal masses palpated on right side. June 1, 1922, retroperitoneal masses growing rapidly. July 1, 1922, patient in comatose condition with numerous metastases. July 8, 1922, died.

Chevassu says that true neoplasm of the testis never spreads to the other testis. In 1915 Coley reported a case of bilateral abdominal malignant testes removed at operation, by John Wyeth in 1905. In that same year O. C. Smith reported a case of bilateral malignancy in undescribed testes. Only recently has a case of simultaneous

* Presented at staff meeting of St. Joseph's Hospital, San Diego.

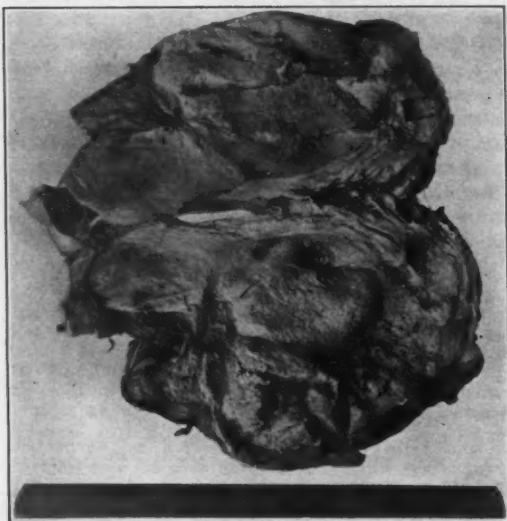


Fig. 1
Cut surface of right testicular tumor showing its enormous size and the absence of normal testicular tissue

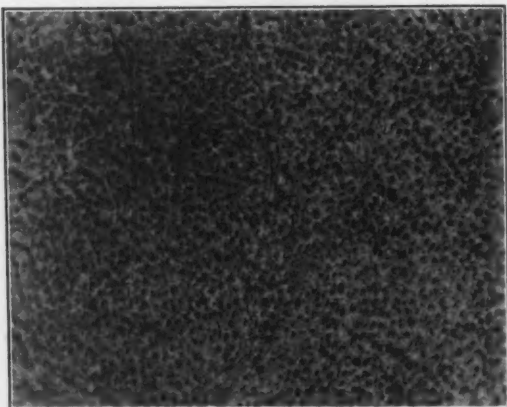


Fig. 2
High power microphotograph showing the typical large, polyhedral cells with large dense nuclei, containing numerous mitoses, and a clear, almost colorless cytoplasm

cancer of both testicles been described by Oraison. His case was that of a man fifty years of age, who, early in 1918, suffered a testicular traumatism. Some months later, when he had apparently recovered, he made a journey of 15 kilometers on foot. Immediately afterward, his right testicle became swollen, but not painful. This swelling increased, and in a short time similar changes took place in the left testicle. The patient was treated locally for two months, at the end of which time operation was decided upon, but diagnosis was reserved. In the region of the left testicle the vaginalis was filled with fluid and a neoplasm was found, involving the testicle and cord. A similar condition was found on the right side. The tumor on the left side was removed, but the growth on the right was left intact, owing

to the patient's condition. Microscopic examination of the tumor showed it to be an epithelioma, having its origin in the seminal vesicles. The points of interest in the case are the bilateral position and its relation to trauma. In the case reported in this paper no point other than the testes themselves could be determined as the origin.

GLIOMA OF THE RETINA

Case Report by HUNTER L. GREGORY, M. D.,
Stockton, Calif.

The patient whose history is here given is a boy, age four. The child was brought into my office by his mother on April 6, 1922, with a request that I examine his eyes.

On questioning the mother I was told that the first evidence of any ocular manifestation was in December of the preceding year, at which time there was noticed a diminution in the vision of the left eye.

When I first noticed the patient I observed a bright, whitish reflex emanating from the pupil, and on examination there was noted a marked increase in tension, the pupil was dilated, cornea and anterior chamber clear, lids and conjunctiva normal. Fingers could be seen to the temporal side.

The pupil was dilated, and on ophthalmoscopic examination I was able to observe a mass situated behind the lens and covered with newly formed blood vessels.

In making a diagnosis in these cases we must consider pseudo-glioma, in which case there will be a history of acute febrile disease followed by inflammation of the eyeball and also a previous inflammation of the iris. In this case there was no such history given and I felt justifiable in making a diagnosis of glioma.

Immediate enucleation was advised and I could see that the mother was prone to seek other advice. I did not see this patient again until the latter part of November, at which time the eye had become transformed into a large, ulcerated, painful and bleeding mass, filling the entire orbit and projecting out between the lids.

Christian Science treatment was then discontinued and the eye enucleated. Since that time I have been unable to obtain additional history.

PSYCHOTIC SEQUELAE OF EPIDEMIC ENCEPHALITIS*

By ROBERT LEWIS RICHARDS, San Francisco

In the study of epidemic encephalitis our attention during the epidemic period of 1919 and 1920 was too much centered on the lesions of the mid-brain and the reactivations of the process. Many mild cases were overlooked or wrongly diagnosed only to manifest more marked cortical disturbances later and lead to a more correct diagnosis. Among the large number of patients in out clinics, this mistake in diagnosis has frequently been discovered. Thus, at Bellevue Hospital low psychometric results in successive tests of the same individuals were found to depend upon an intervening attack of epidemic encephalitis (Mental Hygiene, Janu-

* Read before the Section on Neuropsychiatry of the California Medical Society, May 17, 1922.

ary, 1922). There can be no mistake about the cortical involvement in such cases. I have also repeatedly proved that the toxic changes of chronic drug poisoning and alcoholism produce a low psychometric rating if the testing is done within thirty days after admission to the hospital. Later psychometric ratings have shown the real mental level for the individual.

Other psychotic manifestations in cases of relatively recent epidemic encephalitis have led me to review the early psychotic manifestations, select the more persistent diagnostic indications and collect a series of 16 previously undiagnosed cases with different psychotic manifestations that have come under my personal observation and study during the past year. The accounts of early psychotic symptoms in epidemic encephalitis are plentiful in recent literature. Kirby describes very clearly the delirium with its various dips, the stupor with preserved personality, the presence of a sleeplessness as well as excessive drowsiness, the catatonic type and the Korsokow type of syndromes—all in the acute stage. He states also that when examined later all the eighteen cases showed distinct mental abnormalities chiefly in the emotional sphere.

Jones and Raphael described more in detail the early psychotic manifestations in four well-studied cases as follows:

An initial irritative stage resembling the usual somato-psychoses, e. g., euphoria, hypomania, hallucinations, hysterical symptoms, and occasionally paranoid ideas, and confabulation.

Later a stuporous stage with marked emotional defect. Cataleptic states and mask-like facial expressions were also noted at times.

Personality was remarkably well retained and, being only blurred by this stupor, modified the manifestations.

Amnesia for the irritative stage was common. Mental residuals were seen in all cases.

Archambeault and I. Abramson, Cruchet, Sainton, Tilney and Howe, Burr, C. K. Russell, and L. B. Holman all describe similarly the striking emotional stupor; all theorize as to the localization of lesions in the thalamus, or pons, or elsewhere; and all agree as to the involvement of the cortex.

There are many mystifying features as to points of particular involvement in this disease and also in anterior polio-myelitis, where the spinal cord and the seventh cranial nerve special involvements may be compared with the mid-brain and third cranial nerve involvements in epidemic encephalitis. But it is more important to know all the possible involvements and thus the possible range of clinical symptoms.

Remissions and reactivations are common in epidemic encephalitis and in all proteosomal diseases—neurosyphilis, hydrophobia, trypanosomiasis, spirilosis, for example. It seems logical and necessary, however, to think of a continued disease process.

We are obliged to depend upon clinical manifestations, since in both epidemic encephalitis and polio-myelitis, laboratory studies do not explain the

localization or remission or give us any positive diagnostic aids.

Clinically, epidemic encephalitis was first recognized and described because of its psychotic manifestations and called "sleeping sickness," although it might as well have been called in some cases "sleepless sickness." From a study of all the psychotic symptoms, we have a distinctive clinical picture of the early stage as described above, and we find in our list a varied assortment of late psychotic manifestations.

It is interesting also that we have here the usual requirements for the development of a psychoneurosis, viz: a period of imbalance with stress and exhaustion and hypersuggestibility, such as we find in war neuroses, but in not the same degree, or showing such simple clear-cut clinical pictures. As to the pathological basis of this and other psychotic sequelae of epidemic encephalitis, there are unlimited possibilities but no proven facts. We also know that the whole physical system is below par, and that unusual bodily sensations must be produced in a person whose resistance is lowered, whose critique has been in abeyance, and in whom the continuity of personality has been disrupted.

In general also, from the physical side, we have in epidemic encephalitis a disease process, varying greatly in severity of onset, and recurring at irregular, unsuspected intervals, and in different forms. We might speak of three general characteristics of this disease, viz:

1. Remarkable variation in the intensity and manner of the initial attack often leading to mistake in diagnosis.
2. Recurrences of varying degree and localization, which are mentally very disturbing to the patient.
3. A chronic type of disease which is always a difficult fact for personal adaptation.

In establishing psychotic manifestations as sequelae of epidemic encephalitis we have in general some distinctive features which are diagnostic aids.

I. In following the history back, we find an initial period with amnesia and a delirious type of symptoms which strongly suggest the "initiative stage" of epidemic encephalitis.

II. Prior or concurrent so-called "influenzal" cases is a suggestive clinical fact.

III. Third nerve involvement during an attack and recurrently present in the subsequent history of this case. At the time of examination this may be only a mild convergent weakness, but inquiry will reveal prior evident double vision. At times, too, such an adaptation is secured that the patient will not mention a near double vision.

Waidenbaugh describes the general eye symptoms as follows most completely:

1. Ptosis—frequent, fugacious, and usually associated with
2. Diplopia, which varies greatly in degree.
3. Disturbance of visual acuity by retrobulbar neuritis, in an inconstant capricious fashion. Central and ring scotomata may be seen. These scotomata resemble what one has seen in multiple sclerosis, syphilis, glaucoma and retrobulbar neu-

ritis. It would seem, however, that the inconstancy and the symptoms complex would prevent mistakes.

4. Accommodation paresis which is seen also in syphilis, botulism and diphtheria.

5. Convergent paresis—most frequent and fugacious.

6. Anisocoria noted in 20 per cent of the cases.

7. Nystagmus—also frequent in acute stages.

As to the order of frequency of eye signs, Gustavus Hague states the following:

1, Diplopia; 2, ptosis; 3, impaired accommodation; 4, optic neuritis.

Inquiry among San Francisco ophthalmologists indicates that convergent weakness is more frequently and characteristically noted. In my series of sixteen cases convergent weakness was noted at examination in thirteen cases.

IV. Sleep disturbances. Sleeplessness is especially noted in the psychotic sequelae. In these sixteen cases were found nine cases with lessened or no sleep, one with too much sleep and six with no discovered disturbance. German reports show a series of twenty-two cases with similar histories, with no sleep at night and some sleep in the day time.

V. Resistance to the usual methods of treatment in that more time and effort are required. Hence it is well to prepare the patient and the family for rather prolonged efforts and irregular progress. Only in this way can the necessary continuous treatment be secured and the patient be protected against the ineffective multitude of present-day so-called methods of treatment. Much can be done for immediate relief and final complete or nearly complete restoration. The general experience is hopeful and the patient has the right to this hopefulness. The following additional points in the charted summary of the sixteen cases should be mentioned:

1. Of the thirteen cases with war service only four had been overseas and these had no record of

any war neurosis in France. Hence war experience per se had no particular role.

2. Personality studies showed a defective make-up in nine cases (five inadequate, three unsuitable and one hypersensitive prior to illness).

3. The family histories showed nine with no evidence of neurotic taint obtained at examination and seven with evidence of neurotic taint.

On the whole, then, we have not a resistant stock in these cases.

4. The duration between initial attack and time of examination was two to three years in eleven cases and nine to twenty months in five cases. Of these five cases it is interesting that two cases had marked organic changes with mental deterioration and three cases were already markedly psychoneurotic.

5. Vasomotor disturbances, indefinite pains and lowered general muscular power were present in these cases, but otherwise no organic physical changes.

6. Tremors, increased reflexes and in a few cases old paralyses were noted.

7. The intervals between the acute initial attack and the time of examination showed markedly varying symptomatology, but with the tendency for the psychotic features to predominate. If these features had been recognized early, treatment would have given better and more prompt results.

8. Of the three epileptic and four amnesia cases all showed psychoneurotic features and the diagnoses were not clear. On this account I am inclined to regard them more in the light of psychotic sequelae of epidemic encephalitis.

In these cases we have traced all the histories back to a similar origin; we have seen a similarity in the manner of development; we have found diagnostic features in common for the group; and the end results have special features and special outlook. For our own interests and the interests of the patient it is wise to recognize the psychotic sequelae of epidemic encephalitis.

Personal Data	Initial History	Progress	Present Status	Chief Facts	Outlook	Remarks
1—Aug., 1921 C. M. Fam. History— Nervous mother Per. Hist. Neg.	3 mos. sick 1918 Delirious period with amnesia Diag. Flu. Epl. attacks afterward.	No. of Epl. at- tacks: 1918—1 1919—No record 1920—5 1921—2 Petit. Mal. fre- quent.	Past 3 mos. depressed. Suggestible, de- scribes typical. Major attacks. is suggestible.	Eyes neg. now. Formerly dim vision. Neurological Exam. neg.	Psychoneurotic element most marked at present.	Description of major attacks was typical, evident psycho- neurosis also.
2—Aug. 29, 1921 W. J. Fam. Hist. Neg. Per. Hist. Neg.	Sept. 1918 to Jan. 1919 Stupor delirium and diplopia	1920. Headaches, periods of dip- lopia and som- nambulism. Amnesic peri- ods: frequent short and sev- eral long.	Dreamy, rest- less, conver- gent weakness. Physically re- duced.	Diplopia. Dreamy. Amnesic periods.	Uncertain.	Seems suggest- ible and very dependent upon traveling com- panion. Never returned as he promised.
3—Aug. 8, 1921 J. R. F. H.—Father apoplexy P. H. Neg.	Sept., 1919 to May, 1920 Stupor, diplopia, delirium, left hemiplegia, bowel and blad- der incontinence.	Recurrent at- tack, May, 1921 Some bulbar symptoms.	Left weakness and sl. spasti- city. Still bul- bar difficulty. Variable dip- lopia. Is deteri- orating and sleepless.	Diplopia. Left hemiplegia Bulbar symp- toms. Mod. Dementia.	Bad.	Moderate dementia.
4—Aug. 24, 1921 A. P. F. H. Neg. P. H. Inade- quate	Dec., 1919 Stupor, visual difficulty and pain over left fifth nerve.	March, 1921 Improvement sight. Aug., 1921 More hysterical symptoms.	Convergent weakness. Tie left platys myoides. Sen- sory disturb. left 5th. Speech hesitancy, sug- gestible.	Diplopia at times. Tic. Hysterical signs	Good.	Returned Feb., 1922, and was much improved. Hysteria.

Personal Data	Initial History	Progress	Present Status	Chief Facts	Outlook	Remarks
5-Sept. 1921 W. E. G. P. H. Neg. P. H. Inade- quate	Nov., 1918 Del. and am- nesia. In bed 1 mo.; visual difficulty.	Migraine, 1919 Diplopia, 1921 Nervous and hypersensitive.	Tires quickly. Migraine, diplopia, jumps at noises, sleeps poorly.	Diplopia. Tremors. V. M. Stasis.	Guarded.	Neurasthenia prominent.
6-Sept. 15, 1921 L. K. Fam. Hist.— Nervous father P. H. Emotional and unstable	Oct., 1918 Delirium and amnesia with subsequent fainting spells.	Spells of am- nesia for peri- ods of some du- ration 1919-4 1920-3 1921-2 Many short absences.	No fits. Re- current amnesic periods with automatism. Convergent weakness. Petit mal attacks.	Convergent weakness. Petit mal. Emotional and unstable.	Has lost many jobs.	Amnesic attacks and petit mal.
7-Sept., 1921 W. R. C. F. H.—Parents nervous P. H. Neg.	Jan. and Feb., 1921 Stupor and de- lirium and fever with indefinite paralyses	Recurrent at- tacks, July, 1921.	Mod. left weak- ness. Is emo- tional and un- stable; has Wass. + + +; Convergent weakness.	Remains of left hemiplegia. Convergent weakness. Hysterical.	Improbably syphilitic.	Hysterical. Remains of left hemiplegia.
8-Oct. 25, 1921 G. W. M. F. H. Neg. P. H. Inade- quate.	Stupor, visual difficulty and amnesia, Jan., 1921.	Prolonged am- nesia and auto- matism to Oct. 1921.	Convergent weakness. Tre- mors. Inco-ordi- nation. Occipital pains. Misinter- prets sensations.	Diplopia. Tremors. Amnesia. Misinterpreta- tion. Increased reflexes.	Doubtful.	Question of paranoid development at first. Proved psychoneurosis.
9-Nov., 1921 L. A. S. F. H.—Nervous mother P. H.—Change- able, but 7 yrs. good mil. rec- ord.	Nov., 1918 Blurred vision, drowsy, fever, unusual conduct	Recurrent peri- ods of drowsi- ness, headaches and amnesia of short duration.	Recent prolon- ged amnesia w. stress. Tremors. Nys- tagmus Diplo- pia. Rt. angle mouth lower. Suggestible.	Eye symptoms wish mechanism of amnesia. Suggestibility. Increased reflexes.	Conduct dis- orders made this difficult.	A pscho- neurosis.
10-Dec. 8, 1921 L. R. J. F. H. Neg. P. H. Neg.	Psychoneurosis followed by fever, del., in- somnia, left hemiplegia, Oct., 1919.	Parkinson syn- drome, 1920. Insomnia, has been thought demented.	Drools. Mask face: typical tremors and propulsion and speech. Is fed and dressed but is clear men- tally.	Parkinson syndrome. V. M. Stasis. Increased reflexes. Emotional.	Questionable.	Diagnosis of precox had been made. Parkinson sequellae present.
11-Dec. 9, 1921 W. H. F. H.—Mother nervous P. H.—Erratic, impulsive.	Dec., 1918 Flue and par- tial paraplegia. Aug., 1920 Fever, del., dip- lopia, insomnia and hysterical symptoms.	Insomnia per- sistent. Periods of hysterical excitement with amnesia.	Partial para- plegia with mod. atrophy. Reflexes upper +++. Reflexes lower dim. Dip- lopia —. Erratic, emotional and with insomnia. Anxiety periods.	Diplopia. Paraplegia. Hysterical symptoms.	Bad	Psychopathic personality with encephalitis 1920 and mark- edly pscho- neurotic now.
12-Jan., 1922 C. P. F. H.—Mother nervous P. H. Neg.	Fall, 1919 Del., stupor, diplopia, right hemiplegia.	1920, Parkinson syndrome: good improvement. Became auto- erotic and depressed.	Reflex's all + + + Convergent weakness. Hypersexual. Is emotionally de- teriorated. Parkinson Syn. Right weakness.	Diplopia. Rem. Rt. Hemiplegia. Parkinson syn. Psychoneurotic. Hypersexual. Apparent de- terioration.	Masturbation stopped. Improvement slow but sure.	Shows great suggestibility emotionality, rather than hopelessness.
13-Jan., 1922 P. H. F. H. Neg. P. H.—Nervous and inade- quate, moron 9 B 5.	1919, Fall of. Fever, stupor, del. and blurred vision.	Insomnia per- sistent. Weak and in- effective.	Diplopia. Complete insomnia: suggestible and emotional. Reflexes + + +	Diplopia. Insomnia. Reflexes + + +.	Improved with suggestion.	Case drifted from the south to San Fran- cisco without recognition in spite of German report of 22 such cases.
14-Feb. 24, 1922 O. W. F. H. Neg. P. H.—Emo- tional.	Sept., 1918 Stupor, del., blurred vision and weak after- ward.	Headaches, blurred vision and amnesic pe- riods remained.	Diplopia. Recent amnesia. Dreamy. Inc. reflexes.	Diplopia. Inc. reflexes. V. M. Stasis. Amnesic periods.	Recently an epileptiform attack.	Sharp cut am- nesic periods persisting suggests possi- ble epilepsy. Is inefficient and fearful.
15-Mch. 11, 1922 R. W. B. F. H.—Nervous mother P. H.—Hyper- sensitive.	Sept., 1918 Del. and in- somnia and diplopia.	Dec., 1921 Vision worse. July, 1920, an hysterical puff- ing attack. Dec., 1920, faint- ing attacks, sleep disturbed.	Diplopia. Insomnia. Hysteria with habit spasm, and fainting attack. Nomy oclonus.	Diplopia. Tremors. V. M. Stasis. Inc. reflexes. Hyperesthesia. Hysteria. Insomnia.	Hysterical symptoms re- lieved in two days.	Psychoneurosis totally disabling and mild rem- nants of en- cephalitis.
16-March, 1922 D. C. F. H. Neg. P. H.—Impul- sive, unre- liable.	1919, Fall of. Del., blurred vision, fever, insomnia.	Later fainting attacks at ir- regular inter- vals and follow- ing stress.	Phy. Ex. Neg. Diplopia. Inc. reflexes. V. M. Stasis. Fainting spells with amnesia: suggestible and emotional.	Diplopia. Inc. reflexes. V. M. Stasis. Fainting. hysterical at- tacks.	Good.	Admitted re epilepsy. Was excessively homesick and business poor.

DIAGNOSIS AND SURGICAL TREATMENT OF MALIGNANT TUMORS OF THE KIDNEY*

By WILLIAM E. STEVENS, M. D., San Francisco

Hematuria, pain and a palpable tumor are generally recognized as the three cardinal symptoms of malignant tumor of the kidney. To these a fourth should be added—characteristic deformity of the renal pelvis—revealed by pyelography. It is only within the last few years that this procedure has been accorded the recognition it deserves as an aid to the diagnosis of renal growths. In a review of 413 cases of malignant kidney tumors reported in the literature, I found that only 44 per cent presented hematuria, pain and enlargement of the kidney at the time of examination. On the other hand, pyelography revealed a deformity of the kidney pelvis or calices in almost every instance in which it was used. Blood in the urine is quite commonly found with renal calculi, tuberculosis and nephritis, and it is sometimes seen in the presence of extra-renal tumors, appendicitis, etc. Braasch states that microscopic blood was found in the urine of six of fifty patients suffering from abdominal growths simulating kidney tumors on palpation, but not involving this organ. Pain is a symptom of almost every pathological condition of the kidney, while enlargement of the kidney is often due to hydronephrosis, pyonephrosis, tuberculosis, cystic conditions and nephritis. Deformities revealed in the pyelogram, such as narrowing or displacement of the pelvis, with or without elongation and narrowing of the calices, however, are almost always characteristic of renal tumor. Enlargement of the pelvis is sometimes seen in carcinoma and is due to necrosis of the tumor or to an associated hydronephrosis. Ordinary radiography should, of course, precede pyelography, as stone shadows are usually more readily detected in the uninjected picture.† Visualization of the gastro-intestinal tract by air inflation or by barium meals or enemata is often of great assistance in determining the location of an abdominal mass. Other aids to diagnosis are the occasional presence of neoplastic cells in the urine and the profuse bleeding which sometimes follows the traumatism caused by an ureteral catheter. In a series of 215 cases of hypernephroma, eighty-six of carcinoma and forty-seven of tumors of the renal pelvis in which my own cases were included, a tumor mass was present in 85 per cent, a deformity of the renal pelvis in 84 per cent, blood in the urine in 44 per cent, and pain in 44 per cent.

Differential Diagnosis—The differential diagnosis of the various histological types of malignant tumors of the kidney is at times impossible, but a careful study of the symptoms together with the cystoscopic and radiographic findings will make this feasible in many instances. The following facts are of diagnostic significance.

Hypernephroma—Eighty per cent of the malignant tumors of the kidney are hypernephromata.

Repeated hemorrhages, pain and a palpable tumor which increases rapidly in size are strongly suggestive of this type of growth. With hypernephroma a palpable tumor is present in 85 per cent, a deformity of the renal pelvis in 84 per cent, hematuria and pain in 43 per cent respectively. Pain is most marked with hypernephroma because of the pressure due to the large size of the growth. Hypernephroma is more common in patients over 30 years of age. Calculi are less frequently associated with hypernephroma and tumor of the renal pelvis than with carcinoma. In hypernephroma a narrowing of the pelvis is usually found. Varicocele due to blocking of the renal vein and oedema of the lower extremities due to obstruction of the ascending vena cava are sometimes seen with hypernephroma. Dilatation of the veins of the bladder is not uncommon. The kidney function is decreased in many cases and not infrequently absent. Cachexia appears late.

Carcinoma—About 2 per cent of the malignant tumors of the kidney are carcinomata. A palpable tumor is only found in about 18 per cent of these cases, as death from metastases usually occurs before the tumor has attained much size. Deformity of the renal pelvis was observed in almost every case in which pyelography was used, hematuria in 56 per cent, and pain in 38 per cent. Although a frequent symptom, hematuria is less pronounced than in hypernephroma and papillary epithelioma. If the carcinoma involves the pelvis, dilatation of the latter due to necrosis is not infrequently seen in the pyelogram. Carcinoma usually occurs in patients over 40 years of age. Calculi are frequently associated with carcinoma, occurring in 66 per cent of the cases. Cachexia appears early.

Papillary Epithelioma of the Renal Pelvis—Hematuria is usually present at some time. It occurred in 97 per cent of the above series of cases. Pain and a palpable tumor are found in approximately 50 per cent of these cases. Pyelography reveals deformity of the pelvic outline in almost every case. Dilatation of the pelvis is not uncommon. This type of growth is seldom seen in patients under 40 years of age. Calculi are found in 20 per cent of these cases. Metastases in the bladder and ureter are common.

The following cases present features of unusual interest:

CASE REPORTS

Case 1. G. D. M., referred by H. J. Sartori. An Italian fisherman, 47 years of age, married, entered the hospital complaining of constant pain in both lumbar regions, worse on the left side, and nocturnal frequency of urination. He had never noticed any blood in the urine, but microscopically, a small number of blood cells, in addition to many pus cells, bacteria, and a heavy cloud of albumin, were found. Examination revealed a marked enlargement of the left kidney. Culture of the urine showed a colon bacillus infection. The urine obtained from the right kidney, following ureteral catheterization, contained an occasional pus cell, that from the left kidney a large number of pus cells. Radiographs of the uninjected kidneys showed enlargement of both kidneys and multiple stone formation in the left kidney. Pyelography revealed an irregular and marked enlargement of the left renal pelvis and obliteration of its calices. A double pelvis

* Read before the Section on Urology of the Medical Society of California at Yosemite National Park, May 17, 1922.

† Occasionally, however, calculi are more easily seen because of the opaque coating formed by the injected solution.

and a double ureter were present on the right side, the ureter bifurcating as it crossed the pelvis. Two or three small round shadows were seen at the level of the upper part of the lower pelvis, apparently in its upper calyx. Operation revealed a markedly enlarged, adherent, pyonephrotic left kidney, with stone formation, calcification of the walls of the pelvis and destroyed calices. Several irregularly shaped stones and a large amount of grayish red sand were also present. The kidney parenchyma was firm and fibrous, and somewhat irregular in coloration. Microscopical sections showed part of the normal kidney tissue replaced by heavy fibrous tissue in which were a few spaces filled with remnants of kidney tubules, some collapsed and others containing casts. Large irregular spaces filled with a typical squamous epithelium and epithelial pearls were found in others. There were also many mitral figures present in areas of more recent growth. The growth had developed from the epithelium of the renal pelvis.

Diagnosis: Primary squamous cell carcinoma, nephrolithiasis and pyonephrosis of the left kidney. Following operation, the patient's condition improved, although he still complained of some pain in both lumbar regions. He returned to the country and died three months later of general carcinomatosis.

Comments: Pain, tumor, blood in the urine and deformity of the renal pelvis were present in this case. It is of interest not only because of the marked infrequency of primary squamous cell carcinoma of the kidney—it has been estimated that not over 2 per cent of malignant tumors of this organ are carcinoma—but also because of the interesting anomalies and complications accompanying it. Chronic inflammatory changes due to nephrolithiasis and infection are probably important factors in the etiology of renal carcinoma. The Mayo Clinic reports that 64 per cent of the cases of carcinoma seen by them were complicated by kidney stones.

Case 2. From the Surgical and Genito-Urinary Departments of Mount Zion Hospital. Hypernephroma of the adrenal gland. This condition is very rare and it is often impossible of differentiation from tumor of the kidney. A diagnosis is seldom made prior to operation. The cardinal symptoms of a kidney growth, hematuria, pain, tumor and a deformity of the renal pelvis were all observed in this case. The marked flattening of the renal pelvis, seen in the pyelograms, was due to pressure upon the kidney. Neither the latter nor its capsule were involved in the growth. Many interesting features were present in this case and it will be reported in detail at some future time.

Case 3. From the Genito-Urinary Department of Mount Zion Hospital. M. S., aged 70, single, a bartender, had suffered from slight pain in the right lumbar region during the past year. He had noticed blood in the urine for the past twenty-four hours. In 1913 he had noticed blood in the urine and was troubled with frequent urination. Cystoscopy at this time revealed a pedunculated papilloma on the left of the left ureteral orifice. The symptoms disappeared following the removal of the tumor with snare and cautery. In April, 1918, he again entered the hospital because of hematuria. Examination of the urine at that time disclosed many blood cells, a trace of albumin and a few pus cells. Cystoscopy revealed an inflamed bladder mucosa and a somewhat bloody urine escaping from the right ureteral orifice. Comparative functional kidney tests were negative. The urine was free from blood at the end of a week and the patient left the hospital. Six months later he re-entered, stating that he had suffered from pain in the right lumbar region for the past year and had noticed blood in the urine for the past twenty-four hours. Cystoscopy again revealed bloody fluid

escaping from the right ureteral orifice. The bladder mucosa was normal. Functional kidney tests gave diminished values on the right side. Radiography and the wax-tipped catheter showed no evidence of calculi. Pyelography demonstrated the right kidney pelvis to be somewhat elongated laterally and the ureter entering the pelvis at a right angle. A diagnosis of tumor of the kidney was made and operation advised and accepted. A large papilloma, the size of a walnut, was found when the pelvis was opened. No evidence of ureteral involvement was present. Fourteen months later he again entered the hospital complaining of slight pain in the region at the site of the old scar. He stated that he had been in excellent health since the operation. Cystoscopy revealed a small sessile papilloma at the site of the right ureteral orifice. No other symptoms were present. The papilloma was fulgurated. Nine months later he re-entered the hospital for examination. The papilloma, which was a little larger than at previous examination, was again fulgurated. Up to the present time the papilloma has been fulgurated seven times and radium applied on six different occasions.

Comments: Notwithstanding the apparent freedom from ureteral involvement and the removal of as much of the ureter as possible through the nephrectomy wound, total ureterectomy, as now generally advised, would have perhaps been the better surgical procedure. This question is debatable, however, in the light of the subsequent course of the case. To begin with, the patient was 70 years of age at the time of the nephrectomy, and ureterectomy would have added materially to the risk of operation. The man is now 74 years of age and apparently in good health. He has gained in weight and states that his health is better than it has been in many years.

Case 4. From the Genito-Urinary Department of the Mount Zion Hospital. H. S., aged 29, single, occupation suit cutter, complained of pain in the hypogastric and left iliac regions and frequent and painful urination of two months' duration. A catheterized specimen of urine contained a large number of pus cells, and a few blood cells. No tubercle bacilli were found. Cystoscopy revealed a somewhat infected bladder mucosa. The urine from both kidneys contained a large number of pus cells. Culture showed a bilateral colon bacillus infection. Functional kidney tests revealed a marked diminution of function on the right side. The kidneys were normal in size and position, but pyelograms demonstrated a long, narrow pelvis displaced laterally, with calices obliterated, on the right side, and on the left side a small pelvis with some narrowing and elongation of the major calices.

Diagnosis: Probable tumor of the right kidney with pyelonephritis of both kidneys. Very little relief followed lavage of this patient's renal pelvis. As in the preceding case, the question of treatment is of interest. Because of the questionable condition of the left kidney, I have not considered a right-sided nephrectomy advisable.

Case 5. Referred by Dr. R. Pietrafessa. A married Italian bootblack, 27 years of age, complained of frequent urination during the day and urgency of six weeks' duration. He had lost ten pounds during the past year. The two-glass test showed an equally large number of pus cells in both specimens of urine. No blood cells were present and no tubercle bacilli were found. Urethrascopy revealed an enlarged, irregular verumontanum, with a small papilloma on its left side. Cystoscopy revealed a slightly injected bladder mucosa. The urine from the right kidney was microscopically negative, that from the left kidney contained a large number of pus cells. Functional kidney tests gave about equal values on both sides. Nothing abnormal was seen on ordinary radiography, but

pyelography revealed a marked narrowing, undoubtedly due to pressure on the calices of the left renal pelvis, also a dilated left ureter.

Diagnosis: Tumor of the left kidney. Papilloma of the verumontanum. Verumontanitis. This kidney should be removed.

Treatment: In deciding upon the treatment of a malignant tumor of the kidney it must be remembered that, although an occasional report of spontaneous cure of hypernephroma has been recorded in the literature, the prognosis with this, as with all malignant tumors, is practically hopeless without operation. In view of this fact the kidney should be removed in almost every instance unless associated with definite metastases. Even in the presence of this condition, severe pain, intestinal obstruction or hemorrhage sufficiently profuse to threaten the life of the patient, are indications for operation. A single metastasis which is accessible, is not a contra-indication to surgical interference, but should be removed at the time of nephrectomy. The X-ray and radium are occasionally of value following operative procedure. Michaelsson of Stockholm reports seven of thirty patients operated upon for hypernephroma of the kidney alive fifteen, twelve, nine, seven and four years after operation. The difficulties encountered in the removal of malignant tumors of the kidney are due to adhesions, friability and to the large size of the growth. If the fatty capsule is involved, it should be removed with the kidney. This necessarily includes removal of the suprarenal capsule. The lumbar or extraperitoneal route is preferable for the removal of small or medium sized tumors and the abdominal route for large growths. The complete operation involves the removal of the kidney, the perinephritic fat, together with the suprarenal capsule and the lymphatic vessels and glands in one mass. The incision best suited for this purpose consists of a vertical portion which runs from the tip of the eleventh rib to a point just behind the anterior superior spine of the ilium; from either end of this an incision is carried forward, one following the costal margin, the other the crest of the ilium. The length of these incisions depends on the size of the tumor. A flap consisting of the whole thickness of the belly-wall is thus turned forward from the flank. This incision gives an excellent exposure of the kidney and its pedicle. In all operations the renal vein should be ligated as far as possible from the kidney. Early ligation prevents the squeezing of the malignant cells into the general circulation following the manipulation of the kidney. In papillary epithelioma of the renal pelvis the entire ureter should usually be removed with the kidney, as involvement of the ureter occurs later if not already present.

(Flood Building.)

Climate as a Factor in the Treatment of Tuberculosis—There is no specific climate for the treatment of pulmonary tuberculosis; that no one climate is suitable for all cases of the disease and that it is becoming more and more the consensus of trustworthy opinion that tuberculosis can be successfully treated anywhere under a proper regime of rest, fresh air, diet and time.

There is no conclusive evidence to lead us to believe that high altitude is of any specific influence in the disease.

On the contrary, the great majority of the tuberculous and particularly those in the advanced stages are harmfully influenced by altitudes above from one thousand to two thousand feet.

Indigent consumptives, especially those in the advanced stages of the disease, should not be sent to high and distant climates.

It is important that these facts become of more common knowledge among physicians and the laity —(H. Schwatt, M.D., New York Medical Journal and Medical Record, January 3, 1923.)

ORIGIN AND APPLICATION OF THE PIRQUET NEM SYSTEM OF CHILD FEEDING, UNDER THE HOOVER RELIEF ADMINISTRATION OF AUSTRIA*

By HERBERT M. COULTER, M.D., South Pasadena

The origin of the Pirquet Nem System of child feeding is so closely related to the operations of the Hoover Relief Administration in Austria, that it is necessary to say a word about the latter before going into the merits of the Nem System.

With only a few picked Americans to supervise and a vast army of volunteer Austrians to do the work, Mr. Hoover was able, as I observed during the winter of 1920-1921, to furnish 300,000 children with an average daily supplementary meal equal in food value to one quart of milk, for the very low cost of 7 cents per meal, including overhead expenses. As there were more than a million children in Austria and only a limited quantity of food available, Mr. Hoover invited Dr. Clemens von Pirquet, professor of pediatrics in the University of Vienna, to assume the responsibility of making a physical examination of all the children, and then determining which children should be fed, and also the kind and quantity of food to be given. Professor von Pirquet, after making a preliminary survey, threw up his hands in dismay and said that the job could not be done. He was thinking that experience had shown that the caloric system, which has up to now been employed in calculating the nutritive value of foodstuffs, although it is of the highest scientific value, yet is too complicated and too apt to become purely theoretical to be readily applicable to everyday use. On second consideration he decided to overcome this difficulty by developing and using the NEM SYSTEM, which provides a very simple means of calculating the nutritive value of food, and is better adapted to practical use in our kitchens than the caloric system.

The word *nem* he derived from the three initial letters of the words, "Nahrung-Einheit-Milch," meaning in English, "Nutrition-Element-Milk." By a strange coincidence the initial letters are the same in both languages, and the word NEM stands for a certain quantity of any foodstuff of the same nutritive value as one gram of ordinary milk. Taking the metric system as a basis, the nutritive value of milk would be described as follows:

1 gram of milk is equivalent to 1 nem, abbreviated to 1 n.

100 grams of milk are equivalent to 1 hectonem, abbreviated to 1 hn.

1000 grams of milk are equivalent to 1 kilonem, abbreviated to 1 kn.

Needless to say, the 100 nem or hectonem is the most common measure for rationing purposes, and for this reason Professor Pirquet had an aluminum scoop or ladle made for each essential commodity, graduated to measure one or more hectonem. In this way it was a simple matter for the volunteer helper to ration out an average 10 hn. meal varying more or less according to the prescription of the physician in charge. Consequently, in speaking of a 10 hn. (1 kn.) meal, we mean the amount of

* Read before the Pediatric Section, California Medical Association, Yosemite, May, 1922.

food equal in nutritive value to 1000 gms. or 1 liter or 1 quart of milk.

According to the Nem System, *milk*, which should be the principal element in a child's diet, is made the basic food, and the gram, which equals 1 NEM of nutrition, is the standard unit of measurement. It also follows that the 1000 NEM contained in the quart or liter of milk, is a much more convenient number to handle than 667 calories according to the caloric system.

Professor Pirquet, in developing further the Nem System of rational feeding, whether it be applied to children or adults, coined certain abbreviated terms, such as Siqua, Decinem, Pelidisi, Sacratama, and laid down these fundamental points:

1. The relative nutritive value of foodstuffs as compared with ordinary milk.
2. The quantity of food required for the nutrition of a single individual.
3. A method to determine which individuals require supplementary food when dealing with undernourishment.

(1.) a. The relative NEM value of the most essential food elements:

- 1 gram ordinary milk = 1 NEM.
- 1 gram starch = 5 NEM.
- 1 gram sugar = 6 NEM.
- 1 gram fats = 13 NEM.

b. The relative NEM value of the most essential foodstuffs:

- 1 gram ordinary milk = 1 NEM.
- 1 gram potatoes = 1.25 NEM.
- 1 gram evaporated milk = 2 NEM.
- 1 gram lean meat = 2 NEM.
- 1 gram egg = 2.5 NEM.
- 1 gram beans = 4 NEM.
- 1 gram condensed milk = 5 NEM.
- 1 gram flour = 5 NEM.
- 1 gram rice = 5 NEM.
- 1 gram fat meat = 5 NEM.
- 1 gram sugar = 6 NEM.
- 1 gram cocoa = 6 NEM.
- 1 gram butter = 12 NEM.
- 1 gram lard = 13 NEM.

To visualize this simple method and make it seem practical, let us apply it to a 1000 NEM or 10 hn. supplementary meal, such as was given the undernourished Austrian child:

Condensed milk.....	40 grams =	200 NEM.
Rice	100 grams =	500 NEM.
Sugar	17 grams =	100 NEM.
Bread	40 grams =	200 NEM.

1000 NEM.

(2.) A simple and practical method of determining the quantity of food necessary to nourish a single individual:

For years Pirquet had not been satisfied with the age or standing height, together with the weight, as an index of nutrition. After he had investigated thoroughly on his own part, and taken advantage of the observations of Vierdort-Meeh and others, he became convinced that the surface of the digestive tract was the best index. As this measurement could not be determined on the living person, it was necessary to find some dimension which was

equal to the surface of the digestive tract. This proved to be the sitting height squared, excepting only in cases of bodily deformity, particularly curvature of the spine. The sitting height of an infant may be measured by placing the baby on a table; that of a child or adult by having it sit on a straight-backed chair, both table and chair being arranged with a metric rule.

On going farther it was found that the sitting height squared in centimeters (abbreviated to SIQUA) represented the MAXIMUM number of NEM which the individual could ever utilize, and that three-tenths (abbreviated to three DECINEM) of this number was the MINIMUM number of NEM required for metabolism alone. Somewhere between the MAX. and the MIN. was the ideal or OPTIMUM number of NEM necessary to nourish the individual. The OPTIMUM varies according to the degree of growth and exercise, and would be estimated according to the following rule:

- (A) A young infant lying and sleeping requires for metabolism $3/10$, plus $1/10$ for growth = 4 decinem siqua.
- (B) An infant sitting up requires 5 decinem siqua.
- (C) An infant standing up requires 6 decinem siqua.
- (D) A child able to run and play (including school children) requires 7 decinem siqua.

For example, let us determine the quantity of food necessary for a child about 10 years of age and with a sitting height of 70 centimeters.

(A) We must find the SIQUA, which is the sitting height square, or $70 \text{ times } 70 = 4900$.

(B) We must find 7 decinem SIQUA, which is 4900 divided by $7/10 = 3430$, or approximately 35 hn.

(C) We should divide the 35 hn., as is the custom in Austria, into the five daily meals necessary for a child. This is done by giving 10 hectonem for each of the three regular meals, with 2 hn. for the forenoon and 3 hn. for the afternoon luncheons, making a total of 35 hn. for the day, which is elaborated and visualized by illustration No. 2. (In America the 35 hn. would be divided according to a three-meal schedule.)

(3.) a. To determine the percentage of nutrition one must find the PELIDISI, which, as Professor Pirquet laid out, is expressed by the formula, "The cube root of ten times the weight divided by the sitting height," which should equal 1 or 100 per cent when applied to a normal child. This is based on the fact that there exists a certain definite relation between the sitting height and the weight. (Note that from 94 per cent to 100 per cent may be considered within the limits of normal health, while below 94 per cent is under, and above 100 per cent is overweight.) Using this formula, it is plain that if the weight increases relatively more than the sitting height, the PELIDISI will be more than 100 per cent; if relatively less, then the PELIDISI will be less than 100 per cent. If one knows the weight and sitting height, one can quickly determine the PELIDISI or percentage of nutrition by using an engineer's slide rule or one of Pirquet's tables.

b. To determine the physical condition one must

find the SACRATAMA. (Definition: S. stands for Sanguis or quality of blood; Cr. for Crassitudo or fat contents of skin; T. for Turgor or tension of skin due to water contents; and M. for Musculus, indicating muscular development.)

Each of these four consonants is followed by a vowel, indicating degree. i—indicates excessive; e—indicates abundant; a—indicates normal; o—indicates slightly reduced; u—indicates greatly reduced.

Examples—Referring to Pirquet's table, we find that if a child has a sitting height of 68 cm. and a weight of 23.3 kilos, his PELIDISI equals 91 per cent, or 3 per cent below the limit for normal health; while a child getting the classification of So Cre Te Mo would be interpreted as pale, rather fat, pasty-faced and of weak muscular development.

PELIDISI and SACRATAMA may be used to good advantage in determining which individuals require supplementary food when dealing with undernourishment.

Summing up the three points outlined above: One need not guess how much food a given child needs, nor does one measure the food requirements according to age or standing height of the child. The aim of Professor Pirquet was to work out a scientific and at the same time a practical method which would be easily understood by the laity as well as by the doctors.

In taking up the "application of the NEM system under the Hoover administration," I will say that, while in Austria, I saw the system used in the feeding of 300,000 badly undernourished children, and it was decidedly successful.

Method. The doctor and two assistants examined the children sometimes at the rate of 200 per hour, the children having been previously weighed and measured. Those with a PELIDISI below 93 per cent, or a SACRATAMA with two points below normal, were given a card for a daily supplementary meal.

The food was stored and prepared in large central kitchens, which were usually located in the

basements of former castles. From here it was delivered hot in double-walled containers to feeding stations, usually schools, where the child was obliged to eat his meal in sight of the supervisor, using his own cup, spoon and plate. This requirement insured that the proper child ate the meal, and by his furnishing his own utensils the overhead expenses were kept down. Each month when the children were re-examined, a class graduated and others from the waiting line took their places.

I was shown the roof garden of the Kinderspital, where Professor Pirquet attends 100 pre-tubercular children. Here the children sleep under a slant roof, live in the open air, and are fed exactly as were the larger groups, with three exceptions:

a. The children are re-examined every week.

b. The quantity of food for each child is estimated exactly according to his individual DECINEM SIQUA.

c. The children get *all* their meals on the NEM basis, and are arranged about tables marked 20, 25, 30, 35, etc., according to the number of hectonem the child is receiving per day. (Note—This classification has nothing to do with the age of the child.)

So accurately was the quantity of food estimated for each child that this infallible rule was laid down: "The child must clean his plate before leaving the table." The child seemed satisfied with the amount and seldom did I see one ask for a second helping, and yet the nutrition and growth of the children seemed to be uniformly satisfactory.

I was then shown the outpatient department of the same hospital, where about 400 children were examined daily. Here the nurse would weigh and measure each nutrition case and pass it on to the doctor, who, in the twinkling of an eye, would formulate the PELIDISI (degree of nutrition), the SACRATAMA (physical condition), the DECINEM SIQUA (percentage of sitting height squared), and finally prescribe the kind of food. The nurse would then instruct the mother, in terms of spoonfuls and cupfuls, how to measure and prepare the food.

Diet-Scheme for Child 10 years old, with Sitting Height (Si) = 70 cm., Nutrition Need = 7 Decinemsiqua (dnsq.) = 35 Hectonem (Hn.).

35 Hectonem (Hn.).													Protein Dn. + -
Hn.		+ 1 100 g.	+ 1 Milk 100 g.	- 1 Sugar 17 g.	- 30 g.	- Bread 30 g.	- 30 g.	- 1 8.5 g.	- 1 Butter 8.5 g.	1 30 g.	- 1 Marmalade 30 g.		
6h	10												- 3
9h	3	+ 2 1 Egg	- 30 g.	- Bread 30 g.									+ 2
12h	10	- 100 g.	- Soup 100 g.	+ 5 Meat 40 g.	- 50 g.	- Vegetable 50 g.	- 50 g.	- 20 g.	- Mush 30 g.	- 30 g.	- 1/2 Apple 150 g.		+ 4 1/2
3h	2	+ 1 100 g.	- Milk 30 g.										+ 1
6h	10	- 100 g.	- Soup 100 g.	- 50 g.	- Vegetable 50 g.	- 50 g.	- Meat 15 g.	- 15 g.	- Bread 30 g.	- 30 g.	+ 3 Cheese 20 g.		+ 3
25													+ 7 1/2 Dn.

A diagram visualizing the division of meals, variety and quantity of food, and the percentage of protein which go to make up the daily ration of an individual, viz.:

A. 1st perpendicular column shows the hours for meals. B. 2nd perpendicular column indicates the amount of food for each meal in hectonem.

C. 3rd perpendicular column indicates the total amount of protein more or less than the normal amount (10 per cent) for each meal.

D. Each little square in the horizontal columns contains 1 hectonem (hn.) and indicates the kind and quantity of food necessary to furnish 1 hn. of nourishment. Also a dash indicates that 1 hn. of food contains one decinem of 10 per cent of protein, which, according to Pirquet, is the normal amount for a growing child. Plus or minus signs indicate the relative amount of protein contained in other foods which have more or less than the normal amount. Thus: Bread contains 10 per cent or the normal amount of protein, while milk contains more and sugar less than the normal amount.

THE PRESENT STATUS OF THERAPY IN PULMONARY TUBERCULOSIS *

By WILLIAM C. VOORSANGER, M. D., San Francisco
(From the Oaks Sanitarium, Los Gatos, California)

There can be no more important matter in all medicine for discussion than the treatment of a disease which is still responsible for approximately 10 per cent of all deaths. The death rate in New York City for the past ten years has dropped from 266 per hundred thousand to 123 per hundred thousand, over 50 per cent. This splendid showing will apply to any district in the United States where a well organized campaign has been waged.

How short a time—within the recollection of most of us here tonight—it is since tuberculosis spelt death! How different today, when we can, without fear of contradiction, state that 80 per cent of all beginning cases can be arrested and that practically all tuberculosis is preventable.

Some physicians practicing twenty-five years ago did not tell their patients they had tuberculosis. They were consoled with a diagnosis of bronchitis and sent to the desert or to the mountains to live as long as they could. Today, the physician is remiss in his duty who does not tell his patient the nature of his disease as soon as the diagnosis is certain, because he can hold out hope of definite arrest and restoration to useful existence if the right and proper line of conduct and treatment is pursued.

No treatment in tuberculosis or any other chronic disease can be successful without a rational co-operation between physician and patient. This co-operation is only possible when the patient knows he has tuberculosis instead of a bad cold, pleurisy or bronchitis. No treatment in tuberculosis can be successful without individualization and without a close study of the patient's psychology. It has been my unalterable custom for years to closely observe my patient for at least four weeks after admission before undertaking any special line of treatment. This has a two-fold advantage: First, one gains an exact knowledge of the patient's pathology; second, one learns the peculiarity of his patient's temperament. Not understanding our patient's psychology is responsible for the successful operation of various cults so inimical at the present time to regular medicine. In our desire to try new lines of treatment, some of us sometimes forget the patient. We should study the host more instead of the parasite which feeds on him, and our future results may be better. If we sum up the advances of the past twenty-five years in the treatment of all chronic constitutional diseases, we must conclude that our knowledge and understanding of disease has been greatly augmented; but also, that the net result of all our attempts at successful medical treatment has been small. This applies particularly to tuberculosis. We have learned all about its direct and indirect causes. We have accomplished wonders in its prevention, but we are really as far from a specific cure as ever, although nearly forty years have

passed since Koch discovered the tubercle bacilli. During this period, many vaccines and drugs have been tried, but unsuccessfully. Over one hundred different forms of tuberculin have been put on the market, each with its advocates, each to be tried and then relegated to oblivion. Tuberculin has been unsuccessful because it is a toxin, not an anti-toxin. It is the product of the tubercle bacillus. It adds nothing new to the system because the tuberculous patient constantly manufactures tuberculin within himself. There can be little difference in these various forms of tuberculin, because they all have the same origin.

Must we not pause and seriously reflect when we contemplate that forty years of scientific research on the tubercle bacillus by the best laboratories and medical minds have failed to produce a specific vaccine; that the same work on tuberculosis in human beings and animals have failed to produce a serum? Is there not a very definite reason for this failure? We explain it with the statement that the tubercle bacillus does not circulate in the blood—that it is locked up in the tissues and only its toxins travel through the system. We also know that the tubercle bacillus has an impenetrable waxy capsule, which cannot be dissolved or penetrated by known methods. If these facts are true, then we shall probably never find the specific for tuberculosis through vaccine therapy!

Let us now review the various present-day methods at our command in the treatment of pulmonary tuberculosis. These divide into

1. Drug treatment.
 - (a) Organic extracts.
2. Vaccine therapy.
3. Artificial pneumo-thorax
 - (a) Thoracoplasty.
4. Heliotherapy.
5. Hygienic and dietetic treatment.

It would be futile to attempt to recount all the ethical and non-ethical medicinal preparations which from time to time have been exploited. Cod liver oil held its sway for many years, and many physicians still believe in its efficacy. Creosote was once hailed as a specific because it inhibited cough and is still largely in use under its own name, or some trade-name such as Creosotal or Calcreose. I have never seen any worthwhile result from creosote or its compounds, but have often watched a fair digestion ruined by it. Various tonics have a definite place in tuberculosis therapy, as stimulants to appetite, as "blood-builders," in an effort to increase resistance, but they should not be heralded as cures, nor should they so be considered by physicians. I have found that the best way to administer a tonic is hypodermically. I use cacodylate of soda, 10 per cent, very consistently, to the exclusion of cacodylate of iron. Years of experience with both preparations have convinced me that any efficacy to be derived from their use lies almost wholly in the cacodylate, not the iron or soda, and since the former is more painful, why not employ the latter? I am also convinced that intra-venous therapy is unnecessary.

* Read before a meeting of the Spokane (Wash.) Medical Society, October 12, 1922, and the Portland Medical Society, October 18, 1922.

Any vaccine or drug will be absorbed when placed under the skin in sufficient time to accomplish its effect. If there is more rapid absorption through a vein, which is not proven, the increased jeopardy to the patient by the latter method is out of proportion to any gain by it. The only excuse for intra-venous therapy is where a large quantity of a solution has to be used, as in salvarsan, or where injecting under the skin will cause necrosis.

Calcium has a definite place in our drug therapy. The lactate sometimes acts very well in hemorrhage, and calcium chloride, 5 per cent, is of great use in abdominal pain, whether due to errors of diet or to intestinal tuberculosis. It inhibits peristalsis and gives great relief for days at a time. This drug is given intra-venously, starting with 2 cc. increasing to 4 or 5 cc. after four days, and repeating the maximum dose in four days to one week, if necessary. One often sees cessation from pain in twenty-four hours. The method, of course, is not always efficacious.

A word about the use of narcotics. We need morphine, heroin and codeine in the treatment of such symptoms as hemorrhage, cough and pain, but we must be conservative in their use, because a tuberculosis patient can easily be converted into a drug addict.

Organic extracts have no place at present in the treatment of pulmonary tuberculosis. With the exception of pituitrin, which will sometimes stop haemoptysis, they accomplish nothing and often do harm. I have given leucocytic and lymphoid extract and have almost invariably produced hemorrhage. Splenic extract is now being tried—so far without result. Various endocrin products are recommended for tuberculosis, as well as for every other known disease. The study of the endocrin glands is in its infancy. With these products we are again making the vital error of paying no attention to the "host." The practitioner is being exploited by the advertising laboratory, and some of them in turn are doing an injustice to their patients.

Nuforal—A recent nuclein preparation heralded as a tuberculosis cure is nuforal. I personally visited the laboratory in New York, where nuforal is manufactured; was given sufficient ampules to use on ten patients, and promised to report my results. I have had no success, although employing it conscientiously and according to instruction over a period of three months, the time supposedly required for a "cure." I used nuforal because I believe that every widely heralded "cure" should be tried out accurately by someone willing to publish his results, if only to establish, as in this case, that the remedy has nothing but commercial value. The Nuforal laboratory in June showed me a list of over two hundred persons whom they claimed were physicians in the United States and who they also claimed were using their "cure" for pulmonary tuberculosis!

Chaulmoogra oil, I am sorry to say, has failed to live up to the great hope that every study of this drug inspired. After the rather remarkable results accomplished by Dean and MacDonald

with the ethyl ester in the treatment of leprosy, it was thought that similar success might be achieved in pulmonary tuberculosis. Walker at the Hooper Research Laboratory of the University of California, after two years' experimentation on animals, with a chaulmoogra oil ester of his own, states that he sees no effect on tuberculous lesions. I was one of those permitted to use both the Dean derivatives of chaulmoogra oil from Honolulu and Walker's preparations from San Francisco. I tried them on fairly well advanced patients for a period of six months, starting with 1/10 cc. and increasing to 2 cc., injecting inter-gluteally. The clinical results were nil, and still reputable chemical firms are advertising a commercial preparation of chaulmoogra oil as a cure for tuberculosis. Some physicians are using this drug on their patients, thus losing valuable time in the application of other more efficacious methods. The failure of chaulmoogra oil in the treatment of tuberculosis was a keen disappointment because I believe that a specific for tuberculosis will be found along chemical rather than bacterial lines.

Vaccine Therapy: We have two classes of vaccines—autogenous and stock—the former being made directly from the sputum, the latter from a culture of tubercle bacilli. Much work has been done during the past two years by competent investigators in culturing sputum, and in preparing a vaccine from pure culture of the various strains obtained directly from washed sputum. The results in conditions, such as chronic bronchitis, asthma, and non-tuberculosis have been encouraging. I have seen chronic coughs of years' standing get well, and asthma, not due to a pollen or protein, improve remarkably under a course of autogenous vaccine injection. But I have rarely seen a vaccine made from tuberculous sputum accomplish anything. This fact alone should convince us that mixed infection plays but a small role in the production of such symptoms as fever, night sweats, loss of weight, loss of appetite and nausea, the syndrome usually considered as indicating toxemia. The tubercle bacillus itself produces sufficient toxine to cause all the toxemia usually met with in tuberculosis and a mixed vaccine could have little effect.

Tuberculin, toxins, and stock vaccines, have fallen largely into disrepute of late years. It would be useless and unnecessary to take you back through the decades since Koch electrified the world with his announcement that he had an absolute cure for tuberculosis in tuberculin, or to dwell upon Trudeau's statement that after using tuberculin for twenty-five years he was convinced that more patients were alive who had received it than those who had not. Is it any wonder that many of us became extensive users of this once heralded specific? I was an ardent believer in the efficacy of tuberculin until three years ago, when I practically discontinued its use. I used it both in sanitarium and ambulant practice for a period of ten years, in every afebrile case, and must confess that my published viewpoint of a few years ago has somewhat changed. Tuberculin, however, properly employed, beginning with very small doses

and gradually increasing without reaction until a tuberculin tolerance is achieved, never harmed anyone and in many cases helped toward an arrest. The psychology in its administration was always greater than its therapeutic value. Bullock, who recently reviewed his twenty years' experience with fifteen hundred cases, states that in the third five years when he was using tuberculin his results were better than in any other period. He attributes this to the fact that patients receiving tuberculin stayed longer at the sanatorium than those who did not, thus permitting other methods of treatment to become effective. Perhaps in this way we can also account for Trudeau's experience.

Remember always, tuberculosis is a disease of undernutrition and lowered resistance. To secure favorable results resistance must be raised—this requires time, often lots of time—and the patient must receive some definite form of treatment upon which to pin his faith while nature is being assisted. Tuberculin, never a specific, might still be largely used as a valuable adjuvant if used wisely. Many have used it improperly and produced untoward results. Some apparently did not appreciate the fact that the tuberculous patient manufactures tuberculin at all times, that antibodies are constantly produced, and that artificial tuberculin, if it accomplishes anything at all, simply stimulates these antibodies, or they might better be termed "natural defenses."

Tuberculin cannot introduce anything new. Still, after all these years with the proven failure of Koch's tuberculin, and its various modifications under different names, we have scientists announcing new specifics in the products of the tubercle bacillus. One of the latest is Much's "Partigens" or partial antigens.

Much comes forward with the announcement that the cure of tuberculosis lies in the non-toxic rather than the toxic product of the tubercle bacillus, claims to have isolated this product, demonstrates its efficacy on tuberculosis in animals, and proceeds to make many, particularly in Germany, use it on human beings. His clinical associate, Deike, is more conservative, stating in his recent book that partigen is merely a mild form of tuberculin, safe in its use, and which does not produce temperature or other measurable reactions. We have a right to ask Much why the non-toxic product of the tubercle bacillus is more specific in its action than the toxic. He states this, but he does not prove it.

Koch, before he announced tuberculin as a cure for humans, also experimented for years on animals. He cured tuberculosis to his own satisfaction in animals, and still he has been proven wrong, as regards the efficacy of tuberculin in humans. Much and his associate to date have shown some results in surgical and gland tuberculosis, not better, however, than those accomplished by ordinary tuberculin. We have as yet to see any report on the successful cure of pulmonary tuberculosis by the administration of "Partigens." I do not want to appear as discouraging new investigations, but I do deplore the fact that

so many remedies still in the experimental stage, are heralded to the public as cures.

Tuberculin still has its place in our tuberculosis armamentarium. It should not be discarded; it should be used sparingly, cautiously, and only in the case which is not progressing with other methods. We at one time used too much tuberculin—perhaps we are now not using enough.

Artificial pneumo-thorax or, as it should be termed "lung collapse," has come to stay. Its results in many cases have been brilliant. It is the one therapeutic measure in tuberculosis which has stood the test of time. Originated by Murphy in this country, and improved by Forlanini in Italy, and Brauer & Spengler in Germany, it is largely used today in unilateral tuberculosis of a progressive type. The principle behind pulmonary collapse is sound and for that reason our therapeutic result is definite. It puts a splint upon a diseased lung, thus inhibiting the latter from pouring toxins into the system, and in this way reduces temperature and night sweats. By direct pressure it often inhibits cough. By alleviating symptoms, the patient is placed in a condition so that other methods will help build up his resistance. In other words, artificial pneumo-thorax treats a broken lung on the same principle that a splint treats a broken leg. The method should be reserved for patients with unilateral lesions, or slight involvement in the other lung, and where a definite period of trial with hygienic and dietetic therapy shows no result.

Collapse therapy often fails of success on account of dense adhesions. For this group we are now attempting partial collapse by admitting 50 to 150 cc. of gas at intervals of one week or oftener. In this way, small areas are compressed, with cessation of symptoms in some cases. In this country the puncture method of Forlanini, rather than the cutting method of Brauer, is universally employed. The method is not without risk. Although since 1912 I have performed over 2500 original compressions and fillings without any but the usual complications, such as effusions, skin emphysema, slight hemorrhage and one bronchial fistula which subsequently healed, there has been one more serious complication.

In the case mentioned, the patient, a young lady, had left the sanatorium after seven months, with disappearance of all symptoms. She returned weekly for a filling of 300 to 400 cc.; during the last of these, the trocar snapped within a half-inch of the hilt, leaving one and a half inches in the thoracic cavity (demonstration of plate showing trocar). After consulting with surgeons, we decided not to attempt removal of the trocar. The last X-ray picture shows diminution in the shadow of the trocar, which means that it is imbedded in the lower end of the thoracic cavity. The patient suffers no ill effect except her own mental disturbance. I quote this instance to prove that with the best technique, artificial pneumo-thorax has a percentage of risk, and that the accident reported above, although unique, may happen occasionally.

Thorocoplasty or lung collapse by removal of all the ribs on the affected side is being recommended. Eloesser has reported five cases success-

fully operated. This method is drastic, but strange to say, if properly executed, not deforming. It should be reserved for those cases where artificial pneumo-thorax is not applicable, and only after the patient is made fully cognizant of what the procedure may do to him.

Heliotherapy has been used with great success by Rollier in Switzerland for joint and gland tuberculosis, especially in children. The method consists of gradually exposing each part of the body to sunlight, beginning with a few minutes daily, until the patient lies naked in the sun for several hours each day. I have had splendid results with this method in stubborn and recurrent gland tuberculosis and shoulder and knee sinuses. We are now trying direct sunlight on rectal fistulae and ulcerations. Where heliotherapy has not succeeded, the failure may be due to faulty technique. It must be carried out gradually over months or years, and the entire body must be exposed until complete pigmentation is achieved. For laryngeal tuberculosis we use a magnesium laryngoscope invented by Frank Verba of Colorado Springs, teaching the patient to direct the sunlight into his larynx. I have recently reported seven cases treated with this method. Even in advanced laryngitis, where arrest is not possible, we get alleviation of pain, thus permitting the patient to swallow comfortably and to take nourishment. Heliotherapy is contra-indicated in pulmonary tuberculosis except in beginning cases.

Hygienic and dietetic treatment is our original, best and most dependable method. It consists of rest, fresh air, good food, sunshine and proper medical advice, under proper conditions. This sounds like a simple program, but is often carried out with great difficulty. Rest means absolute rest in bed until symptoms have become quiet. Here we often meet strong opposition on the part of the patient, who naturally chafes under restraint. We must then study our patient's psychology, or as is popularly termed today, use psychoanalysis, tell him all about himself, what we are trying to accomplish, and make him a willing and enthusiastic partner in the business of getting well, rather than a rebellious patient taking orders. We often hear the family, patient, and physician ask, "Why can't so simple a procedure be carried out at home?" Why must the patient go to a sanitarium? Home treatment of tuberculosis is comparable to learning engineering in a correspondence school. At home the system must be brought to the patient; at the sanitarium he becomes part and parcel of the system. Every case of tuberculosis except the hopeless and temperamentally unfit should spend a shorter or longer period of time at some well-directed sanitarium, in order to learn the meaning of tuberculosis and how to care for himself and protect his family and neighbors from infection. He should also learn how to prevent relapse after an arrest is accomplished.

Unfortunately, the treatment of tuberculosis is expensive and many cannot afford to go to private institutions, and will not go to public ones. The scope of this paper will not permit of economic and sociologic discussion of how to provide care

for the man of modest means in the founding of semi-endowed institutions, which could take patients for a moderate fee, such as Trideau's at Saranac and Barlow's in Los Angeles.

In the important question of feeding we have come to realize that overfeeding in unnecessary and injurious—that proper feeding means giving the patient all he can comfortably assimilate and sufficient to restore his weight to normal. We must individualize with food as well as medicine. The patient's peculiarities must be considered. He should not be forced to eat food he doesn't like or want. Some patients cannot tolerate large quantities of milk and eggs, and this intolerance should be respected. Often the success of treatment stands or falls upon getting a patient to eat. The word "individualization" has come to mean the keystone in tuberculosis therapy, but its uses in the fuller sense are not universally employed. The fundamental principles underlying our treatment are the same for every patient. Their application, however, must be changed to meet the peculiarities and needs of the individual.

I have tried to as briefly as possible review our present known methods for treating tuberculosis. To go into detail on any one of these would require a paper on each. Have I sounded a pessimistic note? If so, it is not because I am personally pessimistic regarding the treatment of pulmonary tuberculosis, but rather that I desire to utter a word of warning against unreliable cures and to plead for the support of proven and tried methods.

If 80 per cent of all beginning cases of tuberculosis can get well, why does the attendance at sanatoria show 50 per cent and over of advanced cases? Why do we get undiagnosed tuberculosis? Surely, with the diagnostic means at our command, particularly the X-ray, every educated physician can make an early diagnosis of tuberculosis. When the diagnosis is made, the patient should be frankly and honestly informed and then given an opportunity to get well. Treatment may be started at home, if considered advisable, but if the patient does not improve something else should be done before his condition becomes advanced and hopeless. In spite of any and all methods of treatment, if the patient's natural resistance cannot be increased he will not get well.

CONCLUSIONS

1. The successful treatment of pulmonary tuberculosis depends upon building up the patient's natural resistance, as well as individualization and a study of the patient's psychology.
2. Time being the essence in treatment, early recognition of the disease, and the immediate resort to well established and proven methods, such as rest, fresh air, sunshine, good food, and proper medical advice is most important.
3. All good methods of treatment have a place in selected cases.
4. Whether the cure of tuberculosis will be discovered through bacteriology, serology or chemotherapy, the future alone can tell, but at present we possess absolutely no specific.

THE INDICATIONS FOR AND THE RESULTS OF ANCHORING HEAD OF COLON*

By O. O. WITHERBEE, M. D., Los Angeles

Having frequently observed a severe and often excruciating type of headache in patients afflicted by lowering and distention of the head of the colon, I endeavored several years ago to determine if this deformity were responsible, in part at least, for the suffering of such individuals.

Pictures following the barium meal in these patients would in many cases show not only a filling defect, but an abnormal retention period extending from thirty-six to seventy-two hours, and even longer, in certain patients who suffered more severely and over a longer period of time. In some the headaches were of daily occurrence, while others would experience them only every third or fourth day, or perhaps once a week. The longer the interval between the attacks, the more severe the onset and the greater the mental and physical depression after the spell had worn off. These seizures were frequently of a semi-epileptiform character and often left the patient in much the same condition as that following such paroxysms.

Careful study of the development of the colon, both before and after its rotation, is interesting and gives a better understanding of the resulting deformities following the advent of adhesions, kinking and distention, which in sequence follow faulty digestion, partial obstruction, and inflammatory processes. The cecum varies in shape, but, according to Trevis, in man it may be classified under one of four types. In early fetal life it is short, conical, and broad at the base, with its apex turned upward and medialward toward the ileocolic junction. It then resembles the cecum of some monkeys, e. g., Mangabey monkey. As the fetus grows, the cecum increases in length more than in breadth so that it forms a longer tube than in the primitive form and without the broad base, but with the same inclination of the apex toward the ileocolic junction. This form is seen in other monkeys, e. g., the spider monkey. As development goes on, the lower part of the tube ceases to grow and the upper part becomes greatly increased, so that at birth there is a narrow tube, the vermiform process, hanging from a conical projection, the cecum. This is the infantile form, and as it persists throughout life in about 2 per cent of cases, it is regarded by Trevis as the first of his four types of human ceca. The cecum is conical and the appendix rises from its apex. The three longitudinal bands start from the appendix and are equidistant from each other.

In the second type, the conical cecum has become quadrate by the growing out of a sacculum on either side of the anterior longitudinal band; these sacculi are of equal size, and the appendix rises from between them, instead of from the apex of a cone. This type is found in about 3 per cent of cases. The third type is the normal type of man. Here the two sacculi, which in the

second type were uniform, have grown at unequal rates—the right with greater rapidity than the left. In consequence of this, an apparently new apex has been formed by the growing downward of the right sacculum, and the original apex, with the appendix attached, is pushed over to the left toward the ileocolic junction. The three longitudinal bands still start from the base of the vermiform process, but they are now no longer equidistant from each other, because the right sacculum has grown between the anterior and posterolateral bands, pushing them over to the left. This type occurs in about 90 per cent of cases. The fourth type is merely an exaggerated condition of the third; the right sacculum is still larger, and at the same time the left sacculum has become atrophied, so that the original apex of the cecum, with the vermiform process, is close to the ileocolic junction, and the anterior band courses medialward to the same situation. This type is present in about 4 per cent of cases.

Now it can be readily seen that the original conical apex of the colon marking the termination of the three longitudinal bands having been drawn medialward gives the cecum a hook shape and especially when we consider the absence of any restraining bands on its lateral surface. The greater the distention of the outer sacculum the greater the tendency to curl toward the median line until a well defined angulation occurs at the termination of the longitudinal bands which have been crowded inward by the distention. As a result of this angulation and the partial obstruction it affords, a pouch is formed, the emptying of which is thus mechanically interfered with, and to a certain extent, also by a reverse peristalsis common to this portion of the bowel. Had the fetal cecum continued to develop in uniform size to the tip of the appendix no such deformity would have resulted and the toxicity incident to retention would have been avoided. However, local deformity should not always be regarded as the only cause of obstruction in this portion of the bowel. A careful study of the entire colon is necessary.

Case discusses colonic peristalsis under normal and pathological conditions and calls attention to the diagnostic and operative errors which may occur if the changing appearance of the colonic shadow during peristalsis is not known. Particular emphasis is laid upon the prolonged stay of food residue in the cecum and proximal colon, and the resulting pain in the right side suggesting appendiceal involvement, which in reality may be due to some obstructing organic or functional lesion in the distal colon or rectum. The motor function he considers of greater significance than the morphological factor.

Peck, in reporting 138 cases of obstructive lesions of the colon and ileocecal region, exclusive of the sigmoid and rectum, classified them as follows: Of 103 non-malignant cases he found 26 due to post-operative conditions; post-inflammatory and congenital bands and adhesions, 58; diverticulitis, 8; tuberculosis of cecum or colon, 8; mega colon, 3. There were 35 cases of obstruction due to carcinoma. The obstruction occurred in the cecum, in

*Read before the General Surgery Section of the State Medical Society, Yosemite, May 17, 1922.

3; in the ascending colon and hepatic flexure, 12; in the transverse colon, 3; in the descending colon and splenic flexure, 5; and in the sigmoid, 12. In the post-operative cases omental and peritoneal bands and adhesions were the usual offenders. In some of these the condition was remedied only with much difficulty, while in others it was easily relieved. Peck warns against sweeping iodine from the skin into the peritoneal cavity and rinsing the hands in bi-chloride solution before introducing them into the abdomen. The typical Jackson's membrane he found to consist of short, tense peritoneal bands which usually were attached to the ascending colon at its anterior longitudinal band, so that they fixed and constricted the gut to a varying degree, and rotated it to the right on its long axis, often from 60 to 90 degrees.

The intoxication resulting from the colon retention is both local and general. The local effect is upon the nerve endings in the wall of the bowel. Here we have the plexus of Auerbach situated within the muscle wall, and the plexus of Meissner situated beneath the mucus membrane. Intoxication of these and the nerve filaments derived from them interferes with both efferent and afferent impulses necessary for reflex action, and we have as a result another example of the "Vicious Circle": lessened mobility, longer retention; longer retention, greater intoxication; greater intoxication, lessened mobility. The evil systemic results following this condition, especially where the entire colon is involved, can be readily appreciated. The immediate disturbance of liver function and the secondary central and peripheral changes are too well understood to warrant discussion.

Adhesions must be separated and all fibrous bands which in any way have to do with angulation or kinking must be cut in order that the colon may be liberated and allowed to lie without restraint, and in contact with the parietal peritoneum in the right flank. Here it is secured by a running suture uniting the lateral longitudinal band to a fold of the peritoneum for a distance of from 5 to 6 inches, taking care to so complete the work that no channel is left between the new line of attachment and the meso colon through which a hernia might develop.

I first ventured to undertake the procedure nine years ago at the close of an abdominal operation for some pelvic trouble, and the removal of the appendix. The patient had suffered the most excruciating periodic headaches I have ever observed. She was for some time in the care of the late Dr. Elbert Wing, who studied her case carefully from the neuropathic standpoint, but was able to do little more than secure partial relief from sedative treatment. Following the straightening and anchoring of her colon the headaches were very much improved, and as time went on they grew less and less noticeable and finally ceased. I have now done the operation 28 times, but never as a separate procedure. In connection with other work I have anchored the head of the colon in such patients as have suffered the character of headaches described.

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THE PHYSIOLOGICAL EFFECTS OF NITROUS OXIDE*

By NEIL C. TREW, M. D., Los Angeles

This paper is the result of an attempt to straighten out in my own mind the physiological effects of N_2O . It is a subject of fundamental importance. If we do not have a clear knowledge of the action of the drug we employ we are on the same footing as the lay anesthetist. If we do not know whether the spasticity of the muscles in a given case is due to lack of O or an excess of CO_2 , or to too much or too little N_2O , we must guess at the remedy to be employed, and can consider ourselves as indeed fortunate if we avoid disaster.

Although N_2O was discovered by Priestly 150 years ago, and has been used as an anesthetic for nearly eighty years, it was not until recently that anything was known of its physiological effects except that it would produce anesthesia and, if given too continuously, would lead to asphyxia and death. Long after the effects of such drugs as opium and digitalis and belladonna had been worked out minutely, the action of N_2O remained unknown, and there are still many problems to be solved and hypotheses to be verified. There are several causes to account for this delay in our knowledge of the drug; first, the fact that it is a gas and therefore more difficult to study (and a very inert gas whose presence is not easy to detect); also, that its effects are so extremely transient and are confined almost entirely to the higher nerve cells, and again that O in just the right proportions has to be administered with the gas to avoid confusion arising from asphyxial symptoms.

In any inhalation anesthesia there are the following elements to be considered: the anesthetic agent, the supply of O, the elimination of CO_2 and the N of the air. All of these enter into the problem and render it exceedingly complex, and when we add to this the fact that we are dealing with the question of consciousness (itself the most mysterious of known phenomena), and the response of the organism to traumatic stimuli, we can realize the difficulties of the problems involved. Consciousness, in some wonderful way, results from the inter-activity of an enormous number of separate brain cells, and we are to inhibit that consciousness by modifying that activity.

In all of the earlier experiments with N_2O the unfortunate mistake was made of confusing the anesthesia caused by the gas with unconsciousness, produced by asphyxia; indeed, for many years the two were considered identical. In 1890 H. C. Wood, as the result of a series of experiments, came to the conclusion that "... N_2O has no inherent anesthetic properties, but that the loss of consciousness which follows its inhalation is the result of asphyxia—that pure N acts in the same manner, that is by shutting off the O." As late as 1915, Crile stated that in N_2O and O we have two antagonistic agencies which gives us perfect control of the anesthesia—the less O the deeper

* Presented by Dr. Neil C. Trew to Pacific Coast Association of Anaesthetists, May 16, 1922.

the anesthesia, the more O the lighter the anesthesia, and even in the recent experiments of Jones and McPeck, reported in Bulletin 5 of the N. A. S., the asphyxia necessarily present from breathing pure N_2O seems to have been ignored in determining the cause of death. When N_2O is given pure the unconsciousness produced is the result of its anesthetic properties plus the attendant asphyxia, with a constant increase in the latter, the longer the anesthesia is maintained.

In 1891 van Arsdale reported experiments in which, by the use of artificial pressure, anesthesia was produced without asphyxia with a mixture of N_2O and 20 per cent O, even though the pressure was raised to only one and one-fourth atmospheres. Since it was known that men can work for hours under a pressure of several atmospheres without being anesthetized by the air they breathe, it at once became apparent that N_2O must differ from N in possessing inherent anesthetic properties. However, it was not until 1909 that Dr. Clarence Webster of Chicago demonstrated that artificial pressure was not necessary and that when combined with O, N_2O could be used for prolonged surgical operations. Following Dr. Webster's work, the use of N_2O and O as a general anesthetic spread rapidly, and clinical observations covering large series of cases were recorded, in addition to numerous experiments on animals. However, we now know that only limited credence should be placed on the conclusions arrived at because of the impurity of the gas used; it was not until 1915, as a result of work done at the Lakeside Hospital, Cleveland, that the gas was freed from dangerous impurities. Accurate clinical and experimental observations really began, then, in 1915. Even now it is probable that the untoward effects noted in some cases are due to impurities in the gas and should not be recorded as the action of N_2O .

N_2O is dissolved in the proportion of 45 volumes of the gas to 100 volumes of blood, without chemical combination, though the fact that more of the gas is dissolved in blood than in an equal quantity of water makes it probable that a certain small amount of the gas must be held in chemical combinations—probably with the lipoids. Its rapidity of action and the promptness of recovery makes it probable that its effects are produced by physical rather than by chemical means. Its effects within the body are manifested almost entirely by the inhibition of the activity of the higher nerve cells. How this is brought about is still a question. Crile speaks of a decreased permeability of the semi-permeable cell membranes, but offers no proof. Dennis E. Jackson in the Year Book, Volume 2, suggests that the absence of the supposedly inert N of the air may in some way be responsible for the anesthesia, but says, "It is, unfortunately, extremely difficult to prove this point." It seems to me very easy to disprove it. If a patient is anesthetized with pure O and N_2O and is kept under for a sufficient time to eliminate practically all the N, and if then the O supply is increased sufficiently without admitting any N, the patient will come out from the anesthetic.

The most commonly accepted theory is that in some way the drug leads to a sub-oxygenation of the body cells. This sub-oxygenation is not sufficient to affect most of the body cells, but is enough to inhibit the activity of the higher nerve cells. It is interesting, in this connection, to recall a series of experiments carried out by Crile some years ago to determine the effects on the different tissues of extreme exsanguination. He found that the higher nerve centers—those latest acquired—were the most sensitive and the first to succumb, and it has occurred to me that herein may lie the explanation of the selective action of N_2O . In all the cells of the body there may be a slight interference with normal oxygenation, but the effect of it may be apparent only in the higher nerve cells, which are particularly sensitive to such influence. In support of this theory are the findings of Davis, who studied the effects of long continued anesthetics on pregnant animals, that "The changes following the use of N_2O being identical with those seen after ordinary asphyxiation, it seems fair to believe them due to long continued interference with cell oxidation."

As N_2O exerts its principal effects upon the nervous system, we will consider that, first—

One of the most common comparisons is between anesthesia and natural sleep. Crile and numerous others have called attention to the similarity of the two states—both may occur in varying degree; in both consciousness is lost, and in both dreams may occur, but the similarity is more apparent than real, and there exists this very important distinction—under anesthesia, and particularly under N_2O anesthesia, a state of analgesia exists, which is not present in natural sleep. This is a point worth considering carefully, for it is one which I think has been overlooked. Our Year Book is called the American Year Book of Anesthesia and Analgesia, but we have been wont to consider the two conditions as separate and as not existing together. In sleep, though the perception of pain may be dulled to a certain extent, no true analgesia occurs; in fact, it is most important for the protection of the individual that it should not occur, otherwise the sleep in which we spend about a third of our lives would expose us to grave dangers. We have all had the experience of being awakened from profound sleep by pain. When worn out one may sleep in spite of pain, but a certain subconsciousness of the pain is ever present.

With most of our anesthetics, and particularly with N_2O , a state of analgesia without loss of consciousness may be produced. Patients coming out from the effects of N_2O after a painful operation are conscious for some appreciable time before they show signs or complain of pain. The conscious maintenance of analgesia during prolonged and painful dental work has been frequently reported, and we all use this state in the management of labor cases. As stated in the Monogram on N_2O Analgesia and Anesthesia in Normal Labor and Operative Obstetrics, "The operator has equally at his command the analgesic state in which the patient is conscious but relieved of pain,

and profound narcosis, when every sense is stilled in lethean forgetfulness; and either stage can be prolonged indefinitely, or readily transferred into the other without untoward complications."

Now, if we are able to produce analgesia without loss of consciousness, it is reasonable to believe that when consciousness is lost under a more powerful action of the drug, the analgesia still persists. In other words, when we produce anesthesia in a patient, we also produce analgesia.

The analgesia is not absolute, as is shown by certain responses to painful stimuli, notably muscle rigidity, but when we remember that the inhibitory centers are depressed and think also how many children and some adults thresh around in their sleep in response to comparatively light stimuli, we can understand how there may be some response to trauma under N₂O without any stimuli sufficient to produce shock reaching the brain. In this connection we may note that the means which we employ to overcome these responses to pain are not directed toward a deepening of the unconsciousness, but to a greater analgesia. We use morphine as a pre-medicant; now, morphine in itself is not a hypnotic, but dulls pain; or we add a certain amount of ether vapor to our gas mixture. Now, in using ether for this purpose one is always surprised at the very small amount necessary to produce relaxation—the amount is so small, indeed, that one suspects that it is the analgesic rather than the anesthetic effect which is needed.

The importance of these considerations in relation to shock production is apparent.

The effects of N₂O upon the nervous system are very quickly recovered from and no ill effects have been noted from prolonged or frequent administrations. Crile found that the brain cells of rabbits suffering from prolonged lack of sleep recovered just as quickly under N₂O anesthesia as under natural sleep, and the gas has been used as a therapeutic agent in long continued nervous cases with apparent good results.

Turning now to the general systemic effects, let us consider first the effect on blood pressure. Mistakes in observation die hard in medicine, and one of the most tenacious of these is the idea that N₂O raises blood pressure. Asphyxia does raise the pressure and, because of the confusion already alluded to between asphyxia and N₂O anesthesia, this mistake has been handed down from one medical writer to another. Castro (1917) and Spencer and Davis (1919) all found that no rise in blood pressure occurs unless there is cyanosis, rigidity or jactitations, and that no rise was present if sufficient O was admitted to prevent these symptoms. Of course, there is always the possibility of a rise in blood pressure, for we are dealing with two gases, one of which has an asphyxiating effect, but none should occur if anoxemia is avoided. As one would naturally expect, the effects upon the heart itself are less than under ether or chloroform. As McCurdy says, "As regard to effects upon the heart muscle and its nervous mechanism, N₂O is indisputably the least

injurious. Heart complications are conspicuous by their absence."

As to the blood itself, all anesthetics tend to reduce the haemoglobin but, as stated in the National Anesthetic Research Society's monograph on N₂O in labor, under N₂O and O anesthesia, the reduction is only slight, but the return to normal occurs in from two to three hours. There is also a decrease of blood catalase, but this also is much less than under chloroform and less than under ether in operations lasting more than forty-five minutes. The alkali reserve is also less interfered with under N₂O. The effects upon the liver cells have been recently studied by Charles la Roque of Montreal, who finds that "N₂O used on patients requiring no surgical intervention produces no cholemia and is the only general anesthetic which does not injure the hepatic cell." Upon respiration N₂O exerts at first a stimulating effect so that under ordinary anesthesia the respirations are from twenty-eight to thirty-two per minute, but under deep narcosis the respiratory center is depressed. If death occurs from N₂O poisoning, it is through respiratory failure. There is a greater variation in susceptibility to N₂O than to other anesthetics, and I think it safe to say that with pure N₂O and pure O given properly, one never gets an overaction of N₂O in normal patients. That is, if death occurs, it results from using an impure N₂O or from some abnormality of the patient.

Muscular relaxation is brought about through the action of the drug upon the nervous supply, for a muscle cannot be paralyzed with N₂O as with ether and chloroform. Through its action on the nervous system a relaxation slightly greater than during normal sleep is produced, but absolute relaxation cannot safely be attained without the preliminary use of morphine, and even then not in all cases. A good working relaxation is produced in the great majority of cases, but if the surgeon demands more than this, then recourse should be had to small amounts of ether vapor rather than attempts to force the action of the N₂O. Secondary saturation seems to be satisfactory in the hands of its originator, but few of us would feel justified in using it as a routine measure. Muscular rigidity and spasm is a sign of O starvation and cannot be overcome by an increased concentration of N₂O without approaching the danger line of asphyxia.

To sum up briefly, N₂O is the best anesthetic we have at present from the patient's point of view, for it is the least toxic and affords the best protection from shock through its analgesic action.

Advertising Methods—The chiropractors are using full-page illustrated advertisements to attract patients, but then that is no worse than what is done by certain supposedly ethical members of the regular medical profession who take up full pages in the photogravure sections of lay publications, or several pages in popular magazines. The chiropractors also are making use of some wonderful signs illuminated by varicolored electric lights, and in some places occupying almost the entire front of a building. Surely, the members of the regular medical profession who are bent upon placing themselves before the public by means of advertising are not going to let the chiropractors get the best of them.

FACTORS IN THE CONTINUED DEVELOPMENT OF THE PHYSICIAN *

By LOUIS B. WILSON, M. D., Rochester, Minnesota

A hundred years ago we were a nation of pioneers. Preparatory schools, such as high schools, were scarce. There were but few colleges. Men with schooling beyond the rudiments were rare. Nevertheless, in reviewing carefully the history of the leading men of that day, one is impressed by the fact that though without schooling many of them were scholars; without formal training they were educated; with few books and in primitive environment yet they were cultured, they possessed high character, they were loyal citizens. Their informal education began early, there was no great break in it, and it was continuous throughout their lives. They did not graduate from college and then cease the attainment of wisdom; they continued to grow to the full stature of men.

The leaders of the present generation in all the professions and to a great extent in business are men from schools and colleges. They have had formal training in grade and high schools, in colleges, universities and professional schools. They have graduated, not once but several times. But at their last graduation many of them have apparently put aside once for all, all attempts at further progress in scholarship, in education, in culture. Thereafter they have been interested only in the art and emoluments of their occupation. Their formal training has been long and thorough, much longer and more thorough than that of their forefathers, but many of them have apparently "broken training" permanently at their last college commencement.

Of all professions that of the medical profession today requires the most prolonged formal schooling. The medical student has a course of study definitely laid out for him for a period of a minimum of seven years. This course of study in the college is filled to overflowing with the requirements in physics, chemistry and biology; with a smattering of the humanities. In the medical school the first two years are a desperate struggle to become familiar with the rudiments of at least six new sciences, and the last two years a wild scramble to obtain a general knowledge of the art of medicine by patching together the teachings of a cloud of specialists. Much of the intern year must be spent in becoming proficient in the mechanics of diagnosis and treatment of disease. Taken as a whole it is the common experience of the student who has come into medicine from other fields of science that never before has he been so crowded with work as he is in his medical course. The heavily weighted curriculum allows little time for thought in any field other than the prescribed ones, and too often, it is feared, little time for careful thinking even in medical fields.

Now, is all this high pressure schooling tending to make scholars who continue to progress, or is there a tendency to surfeit the present day medical student with too heavy requirements and too

much cramming, too much routine reciting, too little thinking; so that when he does finally obtain his degree he thereafter looks upon his education as an accomplished fact and ceases to grow?

It is a characteristic of one's advancing age that he should contrast the present to its disadvantage with the past. Yet, even allowing a wide margin for this trait, it seems to me that many of the highly educated young medical men with whom I am now thrown in contact do not have the same gift of continuance of those of an older day. They seem to have become blasé to book learning. They seem to have lost the power to study intensively, even in the field of medicine. Is it possible that in our present method of medical teaching by specialists alone, each of whom attempts to crowd the whole of his special knowledge into the heads of all of his students, that we are sickening our men of a desire to learn; or is it possible that we are developing in them a feeling that they know it all since all that is known in each field of medicine at least has been poured over them? Are we sacrificing enthusiasm, spontaneity, power of personal endeavor, in our students to our desire as instructors to tell all we know? Is it possible that our excellent standards of medical education, as set forth in entrance and exit requirements, in examinations by faculties, state licensing boards and the National Board of Medical Examiners, is developing in the younger members of the medical profession a feeling that, having passed all of these requirements, nothing more is necessary; that there is nothing more to learn; that there is no need for continued development?

If such results even suggest themselves it is perhaps worth while for us to survey the situation most carefully and see if the final outcome is not, after all, failure. Is even the perfect machine, devoid of growth, likely to last as long and do as good work as the less perfect living organism which is continually growing because alive? Do all of our entrance requirements, floods of instructions, fires of examinations, provide the best type of physician for the community, or do they tend to retard growth, to arrest development and result in doctors who fail to attain their highest possibilities as physicians, as citizens or as men? For we must be sure that our system of education encourages the individual to continue to develop not only his professional efficiency but also those qualities which make him a loyal and valuable citizen, those elements of culture which "make him fit company for himself" and those refinements of character which make him a gentleman.

As far as the continuation of the professional development of the physician is concerned, it would appear that there is an excellent spirit abroad. It is the accepted procedure for the medical man to continue to inform himself by a multiplicity of medical journals, by frequent meetings of medical societies, by visits to other physicians and medical centers, and by graduate courses in medical schools, some of which latter are thorough and many of which are stimulating. If any criticism may be made of all these most excellent procedures it is

* Address before the Southern California Medical Society, Los Angeles, November 4, 1922.

that they are too often considered as a thing apart from the daily practice and the daily life of the physician. They are likely to be taken in spurts and to lack relation to the individual patient. Mrs. Jones' ailment is diagnosed and she is treated on the basis of knowledge long since attained. The detail "boning" study of her individual case is not made. A superficial examination, an incomplete diagnosis, a semi-effectual treatment are sufficient to enable the physician to "get by" with her case, because so large a percentage of patients recover with no diagnosis or treatment or with as incorrect diagnosis and mistreatment as that rendered by practitioners of the various cults.

It is surprising how many physicians seem to have lost the power of serious study within five years after leaving medical school. In our experience with applicants for fellowships in the Mayo Foundation we have been particularly impressed by the large number of men, graduates of good schools, who have been out in practice five or more years, and who seem not only to have failed to keep in touch with the progress of medicine made during that period but also to have lost their ability to study efficiently and to grasp thoroughly new situations in medicine. They appear to have become routinists and in endeavoring to keep up with the "practical" art of medicine have lost the power to appreciate the theory of medicine, by which alone they may advance themselves in the science of medicine. This is especially true, of course, of men in relatively isolated communities who have not had daily attrition with their professional brothers. We have come to hesitate seriously about taking on for special training, however insistent he may be, a man who has been five years or more in relatively solitary general practice.

Again we are led to contrast in this respect the men of the present with those of the past, who seem to have retained until late in life the power to study intensively abstruse problems. Is real intellect less common than it was in pioneer days or do we know only of the greater intellects of those days? Is the cramming system of our schools of today deadening in its effect on native intellect or are there too many things of routine character to be done to allow the physician time for really intellectual study of his profession? Did the meagerness of outside interests of the pioneer allow him to concentrate better on the main things of life? Do the diversified amusements of today make more difficult sober thought? Does the very multiplicity of medical society meetings, the fashionableness of clinical trips, the popularity of short post-graduate courses, all offered as pleasant substitutes for the burning of midnight oil, seem to make unnecessary the habit of intensive personal reading and experimentation?

Please do not misunderstand me. I would not for a moment decry the use of any of these substitute forms of study. They are of very great importance. But I cannot help feeling that many of the half-ripe papers read before our medical societies, the brief and too frequently unthoughtful discussions of the same, the long range ob-

servations of surgical operations in popular clinics, and the hastily engorged courses in quick-lunch-counter schools, while infinitely better than merely doing the day's work for the day's pay, are yet expensive and greatly overrated substitutes for regular and serious personal study and investigation. With the present abundance of text-books and treatises in almost every field of medicine and their ready availability, if not by purchase then through libraries, with the great freedom for experimentation which may be enjoyed at little expense by any earnest physician, there is no excuse for any physician not keeping alive his scientific knowledge and his ability to study intensively in his profession. The stock argument that there is no time has no validity. There is time if we will take it though it may reduce our golf, our motoring or even our hunting. I therefore plead for the good old-fashioned accomplishment of reading, for "Reading maketh a full man," and for the practice of experimentation, for "Experiment maketh the accurate man."

But it is not alone in the continuation of the development of the physician professionally to which I wish to invite your attention this evening. It is rather those phases of his development which are even more likely to be neglected than his professional side that I wish to discuss briefly.

Is the physician of today a good citizen? In the sense that he usually keeps out of jail and the alms house—yes. In the sense that he usually pays his debts, lives peaceably with his neighbors and does not make himself a nuisance in the community—yes. In the sense that he is ready to give freely of his means to charity, to pay his taxes promptly, though it may be a bit grudgingly, and to serve his country willingly in time of war—yes. But, in the sense that he takes little interest in the public health of his community, in medical legislation, in County, State or National politics—no. In these respects he does not live up to his capabilities, his opportunities, or his obligations.

We talk a great deal as a profession about the hold that the members of certain medical cults are obtaining in the communities in which they live. We deplore the fact that in many places they are becoming health officers and members of county boards and of state legislatures. Yet, as physicians we are prone to neglect these positions ourselves and to leave them to those members of our profession who cannot make a living in their profession or to the members of the cults. We are inclined to regard the occasional enthusiastic young physician who goes in for public health work as an incompetent or a crank and to fail to support him either by our interest or our co-operation. When a young physician asks our advice about public health as a career we tell him to go into surgery.

The teaching of public health in our medical schools is almost everywhere a farce. Despite this bad teaching, however, many men with years of experience in infectious diseases, for example, come to have very excellent judgment which should be placed at the disposition of the community in

public health affairs. But too often they simply stand aloof and criticize. If they do not feel that they are competent to take charge of public health work themselves, they might be of great assistance by furthering the appointment of and then giving their fullest support to the most competent young man who can be induced to take the position of Health Officer.

Why do we not have better men holding the position of County Coroner? Because better men do not seek it. This position should be held by physicians with good judgment and keen investigative ability. The punishment of crime in our country is so lax that criminals multiply. Many of the failures of justice in homicide may be traced directly to the stupidity of the coroner or his assistant in not discovering the essential facts.

There is almost as great necessity for physicians to take part in community and state affairs, not primarily related to their profession, as in those principally concerned therewith. The most schooled citizen of the community is all too seldom on the school board. The real estate agent, the coal dealer, the banker are there because they are, forsooth, business men and are presumed to save the taxpayers' money. But the health of the school children is seldom considered officially by the citizens who should know most about it, and educational policies of school men receive no authoritative constructive criticism from physicians who should be most fitted to so criticize.

Rarely do physicians of sound judgment seek election to state legislatures. Or if they do, it is in a half-hearted manner and without adequate support from the other members of their own profession. As a result we have the spectacle yearly of state legislatures perpetrating the most asinine legislation in relation to health, to medical licensure and to education. In the meantime the legislative committee of state medical societies in their reports annually deplore the legislative actions taken and express futile hopes for improvement in the future. The way for physicians to get for the community sane health, licensure, and educational legislation is to take a hand directly in its making. Unfortunately, getting elected to do this is not so easy for the physician. He has so long and so assiduously cultivated the narrow view that his duty is solely to the patient, that the patient when turned voter is apt to regard the doctor as his personal attendant only and without knowledge or experience beyond that function. The physician of today in large measure has lost his reputation in the community for broad experience and ripe judgment in matters other than medicine.

If we had in the halls of Congress more broad-gauge physicians, men who had previously proved their public worth in narrower civic fields, would we have so much stupidity, stalling and gallery play as now exists there? For it is fair to assume that the physician's training both in and after school fits him to accurately and dispassionately analyse data, draw logical conclusions therefrom, and make reliable estimates of probable future consequences. Certainly in all matters involving

natural phenomena, including psychological, his observation and judgment should be the equal of if not superior to that of any man of any other profession or calling.

But so long as physicians foster the fiction that their sole duty is caring for the sick, so long will the well take them at their word and concede to them no measure of public worth either in small or large affairs of state. I would urge, therefore, physicians to be not less faithful in their duties as physicians but also to be much more faithful in their studies as citizens since they owe it to themselves, to their profession and to the community.

In the west we are apt to associate culture with Boston and unless we know Bostonians we are apt to think of them as weak, ladylike, effeminate, absent-minded, conventional, impractical and un-resourceful. No doubt these terms all apply properly to some Bostonians, but the cultured Bostonians and the really cultured man everywhere is exactly the opposite to what is implied in these terms. He is strong, manly, virile, clear-headed, free-mannered, companionable, gentlemanly, broadminded, intensely practical and most resourceful. Real culture implies not only a knowledge of the forces of nature and the ways in which they act, a knowledge of the ways in which men have thought and acted in the past, a philosophy which discerns the worthwhile things of life, and judgment that accurately appraises men and their manners; but it also implies that the individual enters into life in the fullest and broadest sense and does not merely sit by as a spectator.

In these days of crowded medical curriculums there is little time therein for other than scientific subjects, and while they themselves may be definitely cultural in their trend, the hurried method of their presentation, it is feared, robs them of most of their cultural value. There is no doubt that we are losing much of culture in our medical schooling by our neglect of the study of languages. The lack of command even of English by many of our present medical graduates is a serious handicap to their cultural progress. Without power of accurate expression how can they grow in habits of accurate thought? And without accuracy of thought how can intellectual development proceed?

But even though the schools were the centers for the roots of culture, we have no right to expect their graduates to possess more than the beginnings of culture. It takes the entire growing stage of a lifetime, not the few years to adolescence and early manhood, to develop the cultured man. The schools can at best only start the process, the individual continues in his development or is arrested therein solely through his own efforts after leaving school. His continued development will depend largely upon his mental environment, his companionship in men and books. If these are crude and commonplace he remains crude and commonplace; if they are intellectual and elevating he becomes more intellectual and more elevated. Let us not err, however, in supposing that all opportunities for culture reside in the schools or the cities.

Few places are so barren that either in nature or in men there is not some inspiration toward better things. It not infrequently happens that the poor and lowly recall to us Thomas à Kempis. Many a man walks blindly through life in an environment much richer than Gilbert White's "Selborne," though White found therein not only the inspiration for his own soul's growth, but for that of generations since; and, of course, books one may always have anywhere. Again we are reminded of the apparent paradox that our forefathers, with so little schooling so often were cultured men, while we of today, with so much schooling, so rarely attain culture.

Is it possible for the physician to be successful professionally, to be on the surface a good citizen, and to have the appearance of culture and yet be without character? Yes. Of course, it is difficult to conceive that the really honest practitioner, the really thoughtful student, who takes a live interest in his community and in his State and who steadfastly seeks knowledge may still be without integrity, yet there is at least sufficient of a margin of such possibility to warrant our speaking specifically of the necessity for every man giving thought to this side of his nature as well as to those already mentioned. I do not mean that the physician shall necessarily be noted in the community for his attendance at church or Sunday school or prayer meeting. I do not mean that he shall in any way seek ostensibly a reputation for integrity. Rather do I mean that fundamentally he shall cultivate a conscience which shall constantly hold up to him the mirror of his own wrongdoings, that he shall know himself for the rascal that he is, that he shall continue even as he grows older and more worldly successful to smart under the whisperings of this still small voice which tells him of his failures, of his weaknesses, of his paltry dishonesties.

We cannot all, like kings of old, have fools in our retinue to tell us the truth about ourselves, but we can cultivate our common sense of right and wrong which, as the voice of conscience, will keep us from being fools ourselves. Without this corrective, even the best of men become puffed up with egotism and think that the world trembles as they walk, seem to lose hold of their sense of proportion and to forget that even the best of men are far from perfect. In this connection I should like to recommend for the physician the very old-fashioned custom of reading Marcus Aurelius, Plato and the Christian Bible. The latter, though it contains many things which the modern scientific man may hesitate to accept, still conveys in the keenest and finest literary language a conception of character which for two thousand years has been the most potent force in developing in Christian nations those attributes which we have come to designate as Christian character: in other words, the gentlemen of the white race.

The foregoing is a rather elaborate program to be sketched as desirable in the continued development of the physician. It means serious work, but then, life is a serious matter. The alternative

is drifting or degeneracy. The American medical graduate of the last ten years has become on the face of it the most schooled man of his age. He should be not only the most scholarly, but he should come to stand in his community for the highest citizenship, the broadest culture, and the most noble character. If he does not seek in his daily life, professionally, intellectually, and morally to develop himself to the highest level to which he is capable of attaining, he is betraying the trust of the State which has expended on his early training thousands of dollars more than he or his parents have ever paid into school treasuries. If he seeks to "get by" with superficial diagnoses, with irrational and unnecessary treatment of his patients; if he neglects his duties toward the public health of the community; if he neglects his opportunities as a voter, as a public administrator, as a legislator; if he devotes his leisure to the things of the flesh only; if he does not broaden his intellect by broader knowledge and broader culture; if he does not constantly key up his character by a keen conscience; if he loses in integrity; if he fails to measure up in any of these things to the fullest measure of a man, he is by just so much a failure and cannot help in some degree in bringing shame and dishonor on what should be the most serviceable, the most scholarly, the most cultured and the most honorable profession, medicine.

An Experimental Study of Ureteroduodenostomy

—Frank Hinman and A. Elmer Belt, San Francisco (Journal A. M. A., December 2, 1922), assert that it is possible successfully to transplant a ureter into the duodenum with little if any evidence, subsequently, of infection or of back pressure, even for as long a period as 440 days. After a surgically successful ureteroduodenostomy, the kidney continues for some time to function and to excrete urine into the duodenum. When the total urinary excretion is poured into the duodenum, as after unilateral ureteroduodenostomy and opposite nephrectomy or bilateral ureteroduodenostomy, the animal dies within twelve days, with marked retention of nitrogenous substances in the blood, and symptoms identical with those following bilateral nephrectomy, except for a severe diarrhea in the terminal stages. Recovery of an animal so treated, even on the eight or ninth day, follows ureteral transplantation from the duodenum to the skin. Uremic and other symptoms rapidly disappear, with pronounced diuresis and the return of blood nitrogen to a normal level. These facts indicate that most, if not all, of the constituents of the urine are readily reabsorbed from the intestines after successful ureteroduodenostomy. Successful unilateral ureteroduodenostomy without disturbance of the opposite kidney doubles the work of this kidney as effectively as nephrectomy, and the opposite kidney undergoes compensatory hypertrophy just as quickly and completely as it does after nephrectomy. The kidney whose ureter has been successfully transplanted to the duodenum, as it also gets double stimulation in the blood, undergoes reparatory changes in every way similar and parallel to those of its compensatory mate, and the anomalous condition of a bilateral hypertrophy will persist for several months. Eventually, in the course of from one to two years, after successful unilateral ureteroduodenostomy, the kidney pouring the products of its activity into the duodenum is found to have undergone marked, if not complete, atrophy, while its mate remains healthy and hypertrophic and continues to perform total function efficiently.

A STUDY OF THE BASAL METABOLIC RATES IN FATIGUE STATES*

By ROLAND CUMMINGS, M. D., Los Angeles

Upon observing the results of the basal metabolism studies on a large number of patients, I was impressed by the frequency of a low reading in patients who were suffering from fatigue, and especially those who were suffering from the nervous fatigue states.

I therefore reviewed the first hundred cases in our files who had a basal rate of minus 10 or below, as well as 50 consecutive cases whose readings were normal-plus 10 to minus 10.

The following table gives the number under each diagnostic heading:

	Readings Normal	Readings Below Normal
Myocarditis		1
Constipation	6	15
Chronic tonsillitis	6	2
Fatigue neurosis	5	30
Psychasthenia	2	8
Syphilis	1	
Hypo-ovarianism	2	2
Hypopituitarism		2
Cystic goitre	1	1
Peptic ulcer	1	1
Hypertension	9	3
Chronic arthritis	4	3
Epilepsy	1	2
Gall bladder disease	1	5
Fibroid uterine	1	
Tuberculosis	1	
Hypo-thyroidism	1	3
Menopause neurosis	1	8
Obesity	1	5
Endocarditis	1	
Pyelitis	1	
Hay fever	1	
Hypochondria	1	
Asthma	1	3
Goitre of adolescence		1
Emphysema		1
Aortic insufficiency		1
Chronic pharyngitis		1
Chronic aortitis		1
Indeterminate	1	5
	50 cases	100 cases

At that time we had fifty-eight patients belonging to the group of nervous fatigue states, in which the diagnosis of fatigue neurosis or psychasthenia, according to the classification of Dercum, were made, and upon whom basal metabolism studies had been made.

Of this group 41 or 71 per cent had a rate below normal, while 17, or 29 per cent, fell within normal limits, taking minus 10 as the lower limit of normal. It seems to me, however, that as a rule if a patient has a reading of a minus 7 or below, the actual rate is below normal, and if this was taken as the upper limit of normal 49 or 84 per cent of our 58 subjects suffering from a group of symptoms which forced us to make a diagnosis of fatigue neurosis or psychasthenia, had basal rates below normal.

To sum up the three groups, we find of those having normal readings 14 per cent belonging to this group of fatigue states; of those having readings below normal, 38 per cent fall in this group; while in a group of 58 cases of nervous fatigue states 71 per cent have readings below normal.

Because of the obscurity veiling the etiology of these troubles this constancy deserves consideration.

At various times some physician has thought he has discovered the underlying cause of these troubles as the expressed belief of Head that the

symptoms of neurasthenia were due to a latent tuberculosis, and the advocacy of McLester that syphilis was the etiology at least in a large percentage—in his series, a positive spinal fluid being present in over 30 per cent. We cannot agree to this as the signs generally used to interpret tuberculosis were present in none of the cases, nor were any diagnoses of fatigue neurosis made in the presence of the laboratory findings or the physical indications known as being caused by syphilis.

There is no doubt but that anything producing chronic exhaustion, from a chronic infection to a train wreck, if severe enough, produces some of the symptoms of a fatigue neurosis in any one; but it appears to take a certain type of individual to so properly react to stimuli as to produce the classical picture in which marked nervous and muscular fatigue, general nervousness, more or less insomnia, bad dreams, poor memory, lack of poise, nervous tension, palpitations, clammy extremities, sensitiveness to cold, basilar headache, desire to weep or scream, band about the head, exhaustion more marked in the morning than evening, many and varied fears and an appearance of good general health, are the various colors in the picture.

The measurement of the basal metabolic rate is merely a measure of oxidation or a measuring of the amount of oxygen actually taken up by the body cells. Inasmuch as the oxygen consumption is very largely controlled by the thyroid gland, we looked for other signs of low thyroid function, e. g., dry, inelastic and pudgy skin, dead, brittle and falling hair, thin eyebrows, poor memory, slow conception, amenorrhea, etc. While these signs were more common among the group with abnormally low rates, yet they were inconstant and did not seem to bear a close relation to the basal rate. In general, however, if the skin was dry, the hair was dry and dead, the memory decidedly deficient, one could be quite certain the rate would be sub-normal.

What, then, is the cause of this condition in which suboxidation is so constant, and in what way is it related to the symptoms of which these patients complain?

Alexander and Cserna state that the brain shows a consumption of 0.360 cc. oxygen per gram minute, while voluntary muscle shows a consumption of only 0.004 cc. of oxygen per gram minute. According to these observers, a given weight of brain uses ninety times as much oxygen as an equal weight of voluntary muscle while at rest. The voluntary muscles constitute 42 per cent of the body weight, the brain but 2 to 3 per cent; yet when the body is at rest the brain consumes five times as much oxygen as all the involuntary muscles combined.

May not this then account for the small amount of energy it is possible for the nervous system to produce, as is manifested by the exhaustion, nervous irritability, lack of nervous control, the mental depression, the insomnia, and the marked lack of sympathetic nervous system poise noted in this condition? And may not this account for the

* Read before the Section on Neuropsychiatry of the Medical Society of California, Yosemite, May 16, 1922.

great necessity of absolute physical rest in patients with marked exhaustion? Again, why when oxygen can be breathed freely, apparently be taken into the blood and brought in contact with the nerve cells, cannot these cells consume this oxygen? If there was a deficiency of thyroid hormone which acts as the catalase causing the union of the oxygen and the cell, possibly in the manner that the spark causes the union of oxygen and the gas in the motor, the explanation might be found. But the other signs of thyroid deficiency are not constant; and, while thyroid therapy is undoubtedly beneficial, it does not produce the good results it should were it solely the deficient element.

Crile, in his studies on shock and exhaustion, found "cystologic changes in the suprarenals in exhaustion from any cause, including insomnia, these changes being more marked in the cortex than the medulla." He states: "Apparently epinephrin alone can cause the brain greatly to increase its work." And again he says: "We may conclude, therefore, that the adrenals are factors in the primary cycle of exhaustion though their role cannot be accurately defined." This is suggestive that the adrenals have something to do with nerve cell oxidation, as activity and oxidation are practically synonymous.

There are other evidences of a suprarenal deficiency in these fatigue states, as

1. A history of excessive mental strain of longer or shorter duration and of greater or less severity. From the knowledge we now have it is reasonable to believe there is a great drain upon these glands during a period of stress, either physical, or mental, and possibly they become chronically exhausted.
2. We know the suprarenal glands have much to do with the working of the sympathetic nervous system. If these glands were exhausted, this might explain the lack of normal function of this system as manifested by cardiac palpitation, local skin flushing, spastic type of constipation, etc.
3. The frequency with which a low blood pressure is observed in this condition.
4. Might the low basal metabolic rate apparently so common, and not satisfactorily explained by a hypothyroid state, be due to lessened adrenal function? Muirhead, studying his own condition of Addison's disease, found his rate to be minus 30. This was brought to normal by one-half cc. of 1/1000 epinephrin solution given hypodermically twice daily.

In summing up the study, there is enough evidence to convince us of a lessened consumption of oxygen. In the majority of cases of fatigue neurosis there is a suboxidation of the individual nerve cell. This disturbance of cellular metabolism may account for the irritability, lack of energy and disturbed function manifested by the various symptoms.

The cause of this disturbance is speculative but probably is due to a deficiency of some chemical element concerned in cellular nutrition, and may be the same thing concerned in shock which we might

think of as an acute exhaustion, while the disease under discussion is a chronic exhaustion.

There are various things that point to this chemical element being related to a deficiency of the thyroid, the adrenals, or both. At least there appear to be definite benefits derived from administering the thyroid hormone, whether the action is directly on the nerve cell itself or indirectly by way of a stimulation of the adrenal glands.

While Addison's disease is the only clinical entity of which we know due to a suprarenal gland disease, yet in the condition known as fatigue neurosis there are so many symptoms which could theoretically be based upon a disturbed function of this gland that it deserves further thought and observation.

(1135 Pacific Mutual Building.)

Indifferences of the Medical Profession in Legal Matters—This subject is being quite generally discussed by the medical writers throughout the United States. The New York State Medical Journal discusses the subject in the following manner:

"Is it not about time that we awake to the needs of self-defense? Each time the houses at Albany adjourn without actually declaring the practice of medicine to be a felony, the profession takes a long breath, and with a feeling similar to Micawber, on the first of the year, when he renewed his I. O. U.'s, they 'thank God that's over.'"

"The chiropractors think enough of legalizing their chicanery to pledge large sums for the furtherance of their interests—they pay the legal profession well to defend them—they appear both in person and by testimonial—they plead persecution and prosecution—they weep great salt tears on the shoulders of our lawmakers, while at the same time they are stealing the lawmaker's birthright, viz., safeguarding the public from quack and charlatan."

"It is unfortunate that the medical profession does not take on self-insurance—pay dues to medical societies sufficient to maintain proper machinery for its own protection. We pay two or three hundred dollars yearly as dues in a golf club—health insurance." The editor then goes on to compare this amount with the amount ordinarily paid by the medical man to his medical society and mentions that of some 15,000 doctors practicing in the State of New York, 5500 do not care enough about medical matters to belong to the State organization.

Doctor Lester Hollander in discussing medical organization and its profit to the doctor, in the Pennsylvania Medical Journal, summarizes the advantages of the physician affiliated with medical organizations in the following manner:

1. It assures the physician's standing in the community, before the public, the law, and the profession.
2. Organization provides access to a continuous post-graduate course.
3. Organization induces the sharing of trade secrets for the good of all.
4. Organization establishes confidence in yourself through the association with the best the medical profession has, and through the meeting and chatting with its leaders, who, by the way, make up the bulk of those attending scientific meetings.
5. Protection from malpractice suits which may arise in the practice of even the best physician is another immeasurable advantage.
6. Organization helps in the elimination of professional jealousy and piracy.
7. Another item of value is the maintenance of fees.
8. A participation in the united effort to protect the population against cults and fads can be hoped for only if the medical profession stands united, and uses collectively its tremendous individual influence for the rights of the profession.

EDITORIALS

AMERICAN MEDICAL ASSOCIATION MEETING

The American Medical Association will hold its seventy-fourth annual convention in San Francisco, June 25 to 29. Convention diagnostic clinics will be held in hospitals accredited by the Council on Medical Education and Hospitals of the A. M. A. in San Francisco and Oakland on June 24 and 25. The California State Medical Society is the host for this meeting. This is the first time that a State Society has entertained the American Medical Association.

Committees are already at work to make this meeting of the American Medical Association one of its best. In order to do this every member of the State Society must co-operate in every way possible; in particular, they should attend the meetings, arriving in San Francisco in time for the State meeting Friday morning and staying through the following week.

THE SHEPPARD-TOWNER LAW

In order that the attitude of the physicians of California toward the Sheppard-Towner law may be made clear, the following brief resume and analysis of that law has been carefully considered by the Council of the State Medical Society, unanimously approved and ordered published as an editorial in the February number of the Journal.

The Sheppard-Towner law has had more discussion and more has been written about it during the last year than almost any other subject before the people of our country, except the Volstead act. The literature about it is of all classes, from many sources, and considers the law from many angles. The unusual interest manifested in this law is because it happened to be the arrow that focused the attention of all people upon certain tendencies affecting the fundamentals of our government.

Opponents of the measure consider it to be paternalistic, bureaucratic, socialistic and political in its purposes and methods of operation, to an extent not yet attempted by any other legislation in our national government. They consider that it gives a bureau of the Labor Department at Washington authority to use the Federal taxes in an unequal and unfair manner; that it is class legislation that invades "states' rights" and interferes not only with the responsibilities and duties of the state government itself as provided in the Constitution, but that it adds another link in the chain of influences tending toward socialization of the home.

Proponents of the law deny some or all of these and numerous other accusations that are made against it. Practically all of the proponents consider accusations of whatever character made against the bill as of minor importance compared to the benefits they claim to believe the law provides in reducing mortality and morbidity incident to childbirth. It is a merry controversy, and we

are not likely to see the end of it for some years to come.

The provisions of the law have been refused by several States. Others, including California, must consider it during the present session of the legislature. A considerable number of States have complied with the provisions of the law. New York rejected the law and forestalled possible criticism, based upon a sentimental appeal of "save the mothers and babies," which every one recognizes, by passing a State law giving the State Board of Health funds and authority to investigate and relieve, as far as possible, the hazards of childbirth among all classes of people who are unable to secure these services on their own responsibility. Massachusetts rejected the law and has entered suit to test its constitutionality in the Supreme Court of the United States.

The Governor of California has recommended its acceptance, and the final position of this State must be determined by Governor Richardson and the legislature now in session.

Position of the Medical Profession

The paternalistic, bureaucratic and socialistic features of this bill overshadow its medical and public health features in much of the literature and many of the discussions. Nevertheless, it has features vitally interesting to physicians, and the physicians of the country and in Congress early called attention to the dangers of the law. The position of the medical profession has been that of opposition from the introduction of the bill to the present. This opposition has been consistent and more nearly unanimous among the physicians of the entire United States than on any other question of which we have records. The American Medical Association, acting through its House of Delegates, condemned the law in a resolution reading as follows:

"Whereas, The Sheppard-Towner law is a product of political expediency and is not in the interest of the public welfare; and

"Whereas, The Sheppard-Towner law is an imported socialistic scheme unsuited to our form of government; and

"Whereas, The Sheppard-Towner law unjustly and inequitably taxes the people of some of the States for the benefit of the people of other States for purposes which are lawful charges only upon the people of the said other States; and

"Whereas, The Sheppard-Towner law does not become operative in the various States until the States themselves have passed enabling legislation. Therefore, be it

"Resolved, That the American Medical Association disapprove the Sheppard-Towner law as a type of undesirable legislation which should be discouraged."
—(Abstract from the minutes of the seventy-third annual session of the A. M. A.)

Many other organizations of physicians have condemned it and, so far as we know, none has endorsed it. The California Medical Association, through its House of Delegates and Council, has condemned it on several occasions. The Council, in a resolution passed over a year ago, instructed the editor of the Journal to be diligent in furnishing information regarding this measure and condemning its application in California. This resolution was the Council's answer to threatening

letters to the editor telling the medical profession what would happen to their pocketbooks if they continued their opposition to this measure.

So far as the officers and representatives of the State Medical Society located in all parts of the State can find out, the only physicians who are in favor of this law are those few who favored the attempt to foist compulsory health insurance upon the people of California and who are in favor of other forms of State medicine and the socialization of medicine and public health. A few physicians emphasize the fact in personal conversation that they are opposed to the measure, but frankly admit that on account of the threatened dangers to their practice they prefer to take no open stand. Physicians who favor State medicine or the socialization of medicine are usually also in accord with the same socialistic features of this law that appeal to the non-medical man.

The Sheppard-Towner law is not only an extreme example of what those favoring "state medicine" would like to have done, but it is one that puts the control of a medical question into the hands of a Federal bureau at Washington. So long as the physicians and other health officers of California comply with the rules of a bureau of the Department of Labor at Washington, they may have a certain amount of the taxes they have paid to the Federal Government back, provided, further, that they will tax themselves for an extra dollar for each dollar of their former Federal taxes that the Labor Department hands back to them.

Every physician, as well as every other worthwhile citizen, is earnestly interested and active in doing everything possible in a practical manner to reduce the hazards of childbirth and increase the happiness and health of mothers and infants, as well as of all other citizens. A recent survey shows that the physicians of California give an average of one-third of their time to service for which no fee is charged. Preliminary records from a further survey also indicate that physicians do not refuse their service in childbirth regardless of the patient's ability to pay, nor do they refuse their services during the period of gestation and the necessary period after birth.

In a recent resolution, the State Medical Society has gone on record as stating that every physician's office in California is a medical center to which any and all people may go and receive service, upon the condition that those who cannot pay or who can pay part will receive the same consideration as those who can pay. Physicians are ready and willing to increase the amount of free work, and they are willing to help both with services and taxes our own State and county health authorities extend help wherever it is needed *to those who are unable to pay for it themselves*. However, they do not extend this offer to the Department of Labor in Washington with a special organization of lay people who already, in some instances, are busy undermining physicians among their own clients in this and in other States.

Governor Richardson and the legislature are charged with the responsibility of accepting or

rejecting the provisions of the Sheppard-Towner law and with the still greater responsibility of making an entirely new appropriation from the State treasury as called for by the law, which is to be expended in a free medical service to all people, regardless of social or financial standing. There unquestionably will be powerful pressure brought to bear to force favorable action on this law. There will be no organized opposition so far as we are informed. The medical profession goes on record with the protest here expressed as being unalterably opposed to the bill, for the reasons herein set forth in addition to others that readily occur to every person. They go on record at the same time with the statement that they are willing, as they always have been, to do everything possible in the way of service or financial assistance to decrease the hazards of childbirth among those people who are unable to bear the normal expenses for good medical care by any means provided and controlled by our own State and with no control by a political body in Washington.

Copies of this editorial will be transmitted to the Governor of California and to every member of the legislature and to the editors of newspapers throughout the State.

MEDICAL ETHICS NOT CHANGED BY ELECTIONS

(Considered by the Council of the State Medical Society at its meeting on January 6, 1922, and unanimously ordered published as an editorial in the Journal.)

An unusually large number of inquiries are being received by the Journal and in the office of the State Society requesting information regarding the effect of the recent election upon requirements for membership in the Medical Society and upon the ethics of the medical profession—at least, that is what the inquiries amount to.

Physicians, of course, all know that the ethics of the medical profession is a moral code, arranged by themselves for their own conduct. It has nothing whatever to do with the law, except that law-abiding citizenship is one of the fundamental requirements of ethics. All professions and all businesses of whatever character have codes which govern the requirements of their membership. It is even said that "there is honor among thieves."

The ethics of the medical profession are over 2500 years old and the fundamentals of ethics have remained constant during that period. Certain codes of ethics connected with religion and the law are even older than that of the medical profession, and some of these also have remained practically unchanged.

One of the principal requirements of medical ethics is that physicians shall recognize as confreres only those who have an approved amount of education in institutions of approved character; who comply with the laws of their community regarding licensure, and who subscribe to the principles of professional ethics. It is unethical, of course, for any physician to recognize by association, consultation or in any other professional way any person purporting to practice the healing art who does not come up to the educational and ethical

standards set by the medical profession for the protection of the public.

Not only do the provisions of medical ethics apply to the physician as an individual, but they apply with equal force to hospitals and institutions that care for the sick and which are served or expected to be served by doctors of medicine. Certainly no physician can honestly comply with the provisions of ethics nor his membership requirements in local, state or national medical societies who practices medicine in an institution that admits the inadequately qualified to membership on its staff or extends to such people the right to practice within its walls. Strong pressure calculated to nullify these requirements always has been brought to bear on hospitals and other institutions caring for the sick by the inadequately educated and sectarian practitioners of one sort or another. This problem is again being agitated as a result of the recent election in California.

Most of the worth-while hospitals in this State have included provisions in their articles of incorporation, or have adopted by-laws which insure adequate educational qualifications of all those who practice within the institution. Others have failed to do this and consequently now have a serious problem to settle, which ought to have been anticipated and about which they have had due notice for a number of years.

All organizations of physicians, hospitals, and medical educational authorities of the country require one standard of education and ethical conduct in accredited hospitals. There is no reason to believe that any of these national or state organizations will change their policies in this respect as a result of the California election.

The duties and responsibilities of the educated, ethical doctors of medicine in California are, therefore, provided and are perfectly clear. No member of the California Medical Association can live up to the constitution and by-laws of his organization, nor to the ethics of his profession, who does not utilize in his practice any and all methods of proved value and who consequently does not practice sectarian medicine; who recognizes in any way by consultation or otherwise those who do practice sectarian medicine, including all those who do not hold the academic degree of doctor of medicine from an acceptable institution of learning. Nor can a member live up to the requirements of his membership and the ethics of his profession who allows his name to be on the staff of a hospital or treats his patients in a hospital where the educational requirements are not equal to those of the medical profession as expressed by the academic degree of doctor of medicine from a university or other acceptable institution of learning. Those licensed to practice sectarian medicine in this State have a legal right to have their own hospitals and to set their own standards for themselves, their education and their hospitals, and this it is announced they propose to do. These hospitals, as well as those operated for physicians, should be properly labeled for what they are so that the public may have no difficulty in securing what it wants.

ANNUAL MEETING OF THE STATE MEDICAL SOCIETY

A skeleton outline of the program of the 1923 meeting of the State Medical Society meeting was published in the December number of the JOURNAL. It is hoped that as many as possible of our members, as well as other physicians, will plan to arrive in San Francisco for this meeting and stay through the next week to attend the American Medical Association meeting, as well as a number of other national medical meetings that will be held at the same time.

All persons interested in presenting papers to the State meeting should communicate promptly with the appropriate section officers. These officers, with their addresses, are listed in each number of the JOURNAL. Because the time devoted to the State meeting has been reduced, the Council rules that papers read by title before this meeting may be published in the JOURNAL during the succeeding year.

All members of our State Society are particularly urged to write to the hotel of their choice in San Francisco and make their reservations early.

Many of our members will be on one or another of the committees of the American Medical Association, and if we are to live up to the usual California standards as hosts, members from all parts of the State must combine to make both our own and the American Medical Association meeting successful.

INSULIN

Insulin is one of the names that has been given to the new anti-diabetic hormone extracted from fresh pancreatic tissue. It is a valuable asset in the treatment of diabetes, but it is not curative.

Von Mering and Minkowski (1889) found that a fatal diabetes followed the total extirpation of the pancreas. Lepine (1909) suggested that this type of diabetes might be due to the withdrawal of an internal secretion of the pancreas. Numerous, unsuccessful attempts have been made to isolate this hypothetical hormone. More or less success accompanied the work of Cohnheim (1903), Knowlton and Starling (1912), Scott (1912), Murlin and Kramer (1913), Kleiner (1919) and Paulesco (1921), but the work of these authors was not sufficiently conclusive to justify the use of such extracts in the treatment of diabetes in man. To Banting and Best (1922) belong the credit of isolating the pancreatic extract known as insulin and bringing convincing proof of its value in the treatment of diabetes.

In explanation of previous failures and partial successes, it had been assumed that trypsin and other proteolytic enzymes present in the pancreas destroyed the supposed, sugar-burning hormone of the internal secretion. Banting proposed to circumvent the action of these enzymes by taking advantage of the well-known fact that the acinar cells in the pancreas which secrete the digestive enzymes degenerate in from seven to ten weeks after the ligation of the pancreatic duct, whereas those of the islands of Langerhans remain more or less intact. Opportunities were afforded him

under Macleod at the University of Toronto for testing this theory and, in collaboration with Best, the work was successfully carried out. Such extracts when injected into depancreatized dogs caused a disappearance of all diabetic symptoms. Collip then prepared extracts from normal, adult, beef pancreas of a sufficient degree of purity to warrant their use in man and convincing results were obtained. It now appears that this extract may be prepared from any pancreatic tissue, if the proper precautions are taken to circumvent the action of the interfering, proteolytic enzymes.

Insulin is injected subcutaneously, two or three times per day. Each cubic centimeter has a definite sugar-burning power which varies with the concentration of the extract, but which apparently has the same effect on all patients, regardless of the severity of the disease.

Alarming, toxic symptoms such as convulsions and death occur in rabbits when excessive doses are given. These symptoms are associated with a blood sugar as low as .04 per cent or less and may be due to the fact that the animals become too free from sugar because such symptoms may be completely and rapidly eliminated by the administration of sufficient glucose. Toxic symptoms, but fortunately of a less degree of severity, have been observed in patients who have received insulin in excess. These symptoms have also been promptly alleviated by the administration of carbohydrate. Fatalities may occur unless some such precautions as the following are taken. The natural tolerance of patients should be ascertained in grams of carbohydrate, protein and fat. The exact value of the food consumed should be known. The exact sugar-burning power of the insulin in grams per cc. should be known. The dosage of insulin may then be adjusted to fit any proposed diet without danger of the patient passing sugar and acetone bodies on the one hand or becoming too free from sugar on the other. As a reward for this type of careful management, patients who would otherwise remain chronic invalids, die in coma or from inanition will be restored to health by ample diets in proportion as insulin is available.

Varying degrees of partial starvation have been used in the past for the purpose of resting the pancreas and thus permitting it to recover from the degeneration produced by overwork. This method has been successful except in those severe cases where the natural tolerance has been insufficient to nourish the patient even when kept continuously at bed-rest. Theoretically the pancreas may be rested by the administration of insulin while the patient is enjoying a fairly liberal diet, regardless of the degree of severity of his disease. It remains to be seen to what extent the natural tolerance may recover with this added help.

To protect this extract from commercial exploitation but with no thought apparently of financial gain, the discoverers have applied for patents in Canada, the United States, England and other foreign countries.

THE RUSSIAN MATERNITY SYSTEM HAS DESTROYED, MORALLY, AS WELL AS PHYSICALLY, A WHOLE RUSSIAN GENERATION

A Crime Which Knows no Parallel in the History of the World

Since the passage of the Sheppard-Towner Maternity Act the fact that the opposition to this class of legislation has grown to such enormous proportions, speaks well for the sense and character of the American people. The unwelcome publicity given to the real character of the bill led to the resignation of Miss Julia Lathrop, head of the Children's Bureau, and one of the bill's chief promoters. Her successor, Miss Grace Abbott, is, like Miss Lathrop, a product of Hull House, although this fact, for some reason, was nowhere mentioned by the press.

The Children's Bureau, which is to have large sums annually from the Federal treasury for propaganda purposes, if the bill passes, has already issued a booklet at the expense of the taxpayers, "Maternity Benefit Systems in Certain Foreign Countries," which is socialistic and bolshevistic in almost every line. This book gives unqualified endorsement to a socialist's book by Madam Kolantai, a Russian woman in the pay of Germany, who is "commissar of Public Welfare" under Lenin (see documents 1 and 7 issued by United States Bureau of Public Information, September, 1918). The work of her department, in taking children away from their parents and herding them together in the "care" of the soviet government, has had such disastrous results, notably with little girls, that it has been characterized by a distinguished Russian, Professor Boris Sokoloff, as *a crime which knows no parallel in the history of the world*. They have destroyed, morally, as well as physically, a whole Russian generation. Sir Paul Dukes says that the central tragedy of Russia today is the results of Bolshevik corruption of children under Madam Kolantai's "welfare" and "maternity" system.—Editorial, Illinois Medical Journal, January, 1923.

CALIFORNIA PHYSICIANS HOSTS TO THE AMERICAN MEDICAL ASSOCIATION

At the suggestion of the Finance Committee and the Central Committee of Arrangements for the American Medical Association Convention in San Francisco, June 25 to 29, we wish to call the attention of all our members to the fact that WE ARE HOSTS AT THIS GREAT NATIONAL CONVENTION. Many of our members are or will be on the various committees. The most important of all of these committees is the Finance Committee. You either have received or will receive a letter from the Finance Committee asking for your contribution toward the expenses of entertaining this Convention. It is urgently requested that every member of the State Society contribute whatever he feels he can contribute for this purpose. Members are contributing from \$5 to \$100 each. It is also particularly requested that the card accompanying the letter be promptly filled out, check attached, and mailed to Dr. John Gallwey, Treasurer, 808 Balboa Building, San Francisco. Please attend to this before you forget it.

MEDICAL, SOCIAL AND SIMILAR PRIVATE OR CONFIDENTIAL "EXCHANGES"

Many physicians and most of the public have an indefinite idea as to just what the "confidential exchange" idea means to those who may need medical advice. The idea originated, as so many ideas of this character do, in connection with medical service for those who were unable to pay. It did not mean much even at that time and, of course, it was not difficult to foresee at any time just where it was headed. It has been making tremendous strides, the most recent and pernicious of which is a scheme of this nature that sells its staff appointments to physicians and through connection with various mail order "doctors" and organizations, practices medicine by mail, directing the curious into certain channels for securing medical advice. Judging from the number of inquiries that the State Medical Society is receiving about some of these ventures, we must infer that the business of confidential exchange is profitable. The only thing confidential about these exchanges is that it is a confidential arrangement between certain specified persons, groups and organizations and certain other specified groups and organizations for their mutual advantage—at least, this is so in all of those who do any work with patients able to pay—and the practice is equally unsound whatever the class of patients. These organizations are known by various names and their contacts at both ends are of various kinds. The Journal wishes to warn the members of the State Medical Society against the possible difficulties connected with contacts with organizations of this kind.

RESOLUTION FIXING ADEQUATE EDUCATIONAL REQUIREMENTS FOR STAFF MEMBERS OR THOSE PRACTICING IN A HOSPITAL

The Hospital Betterment Service of the League for the Conservation of Public Health receives numerous questions from hospitals as to what they can do to insure adequate educational requirements for those who practice the healing art in the hospital and how they can protect their institutions, and those dependent upon them for advice, in all matters medical. The resolution given below was passed by the hospitals of California in convention assembled. It also has the approval of the League for the Conservation of Public Health and of the State Medical Society. The sense of this resolution is embodied in the articles of incorporation of many hospitals. It forms a by-law or an announcement of policy of many other hospitals. This staff requirement applies only to those hospitals that consider themselves agencies of medicine.

Hospitals conducted for the convenience of osteopaths, chiropractors, naturopaths, naprapaths, mental and various drugless practitioners licensed to practice so-called special methods will, of course, provide requirements acceptable to those who patronize and practice in these institutions. It is, of course, clear that hospitals cannot be of both classes at the same time.

Resolution

Resolved, that any person permitted to practice medicine by any method in any department of

Hospital shall be a physician holding the degree of Doctor of Medicine from an institution of learning acceptable to the Association of American Medical Colleges, or the Council on Medical Education and Hospitals of the American Medical Association; who practices ethical medicine by utilizing any and all knowledge of proven value in the prevention, diagnosis and treatment of disease; who is licensed to practice medicine and surgery in the State of California and whose ethical, professional, moral and social conduct is such as to meet the approval of his colleagues and of the community.

MEMBERSHIP DUES

The constitution and by-laws of the State and County Medical Societies provide that annual dues shall be paid before March 1. After March 1, members who have not paid their dues lose the rights of medical defense and usually lose their inclusion in the published list of members in good standing for the year, both in the State Society and in the American Medical Association. The list of members in good standing is reported to the A. M. A. on March 1.

Representation in the House of Delegates of the State Society is based on the membership in good standing in each County Society as of March 1. For these and other reasons, it is exceedingly important that this matter receive the attention of all officers of the County Societies and of all members. Secretaries of County Societies in particular are requested and urged to send in their lists of membership with their checks for the State Society before March 1.

SCIENTIFIC EDITORIALS

The officers of the various sections of the State Medical Society have agreed to furnish scientific editorials for the Journal, the officers and members of the sections co-operating to produce timely editorials that will reflect progress in each of the various recognized specialties of medicine.

The officers of sections are listed in the Directory of Medical Organizations published in each number of the Journal.

This issue contains the first of these scientific editorials. It has been prepared by the secretary of the section on physiology, chemistry and pharmacology.

The co-operation of the officers and members of all sections is invited, to the end that this department may be made valuable.

THE SECTION ON SURGICAL ANATOMY

It will be recalled by readers of the Journal that the California Medical Society has recently added several new sections to the roster of its departments. It is to the newly formed division of Surgical Anatomy and Allied Sciences that I here wish to call your attention.

The State Society and the officers of this section trust that its entrance into the present field of medical and surgical subdepartments will assist in rounding out our annual scientific programs since contributions by this section should deal more especially with clinically applicable aspects of the basis subject of Anatomy and Embryology. It seems to us reasonable to assume that from the large numbers of papers written each year for the different departments falling under the head of General Surgery, a considerable number should be found to have much of their subject matter

grouped about structures of applied anatomic importance. It is hoped, too, that with the foregoing papers of this section may be included surgical procedures and paths of approach which owe their usefulness to the utilization of embryologic principles.

We are looking forward to interesting in this field, surgeons whose work includes bones and joints since this surgical subdivision bears a definite relationship to applied details of anatomic structure. Gynecologic and urologic surgeons also profit much from a knowledge of the intrinsic anatomy of their particular surgical domains as well as derive much advantage from a groundwork knowledge of embryology. One might multiply such statements throughout all the surgical divisions, but the purpose of this communication is but to call to the attention of the members the fact that an effort is being made to revive a subject, the teachings and application of which in recent years has perhaps suffered somewhat.

In the hope that interest may be awakened in this subject, an invitation is proffered to, and co-operation assured, men who desire to use surgically dissected anatomic material which is on hand in the Surgical Anatomic Laboratory of the University of California Medical School in San Francisco. Since our department is a new one, our list of surgical study dissections is not as yet complete, but what we offer may be of some value in the preparation of surgical papers. Our plan of study in teaching, as well as our mode of dissection, has had as its basic principle, to follow applied anatomic paths of access toward the various involved structures.

We earnestly urge, then, the members of this society to submit to the Secretary as soon as possible, plans for the papers to be read before this section at our coming annual meeting. This meeting convenes in San Francisco on June 22 and 23, 1923, and thus precedes the annual meeting of the American Medical Association held in the same city, June 25 to June 29, 1923. Our section, and this applies as well for all other sections of the Society, meets but for one scientific program on Friday, June 22, at 2 o'clock p. m. At that time papers may be read in full or by title and they may subsequently be published in the California State Journal of Medicine. The Chairman, I. S. Ritchie, Loma Linda, and the Secretary, C. Latimer Callander, M. D., 240 Stockton street, San Francisco, invite correspondence and co-operation in the all year round work of their section.

Neosarsphenamine Adopted by the U. S. Navy.—

In the U. S. Naval Medical Bulletin of October, 1922, Rear Admiral E. R. Stitt, Surgeon-General of the U. S. Navy, recommends the substitution of neosarsphenamine for arsphenamine in certain hospitals aboard ship in the navy. The recommendation states: "1. I would recommend that the use of arsphenamine be discontinued on board ships of the Navy and in its place to substitute neosarsphenamine. This same recommendation would apply to stations and smaller hospitals. 2. In the larger hospitals where facilities for the administration of arsphenamine are satisfactory, the choice between arsphenamine and neosarsphenamine should be left to the discretion of the commanding officer. 3. This recommendation is made for the following reasons: (a) In discussing fully this matter with the director of the hygienic laboratory he is of the opinion that most of the accidents attending the use of arsphenamine have been connected with errors in technic. In view of the simplicity of technic when using neosarsphenamine many untoward results would be eliminated. (b) In the clinic of the Brady Institute, neosarsphenamine is used exclusively, and the staff are unable to note any lessened therapeutic efficiency with this than when arsphenamine is used."

FIRST ANNUAL REPORT OF CORNELL PAY CLINIC

This report contains interesting and instructive data to all the physicians interested in the welfare of their profession. Twenty-two thousand four hundred and nine people made 113,981 visits to the clinic during the year. This is an average of a little over five visits per person and an average payment to the clinic by the patient of \$1.57 a visit. The average attendance at the clinic was 317 patients and there were 122 physicians on the staff, exclusive of the senior members of the faculty of Cornell Medical School. The total income for the year was \$179,685.09 and the total expenses of the clinic were \$231,875.40 or a net loss of \$52,190.31. In other words, with a tremendous volume of business among ambulatory or office patients that paid \$1.57 each per visit, the business still lost a large amount of money. The services cost the clinic to render \$2.03 a visit. The amounts paid to the 122 physicians for service is not stated, nor is it stated whether or not the value of physicians' services were included in the costs of the clinic. This ought to be, as it undoubtedly is, of very great surprise to people who believe that volume of professional work, like volume of business in any other walk of life, can be rendered cheaper to the consumer than the same service when rendered by numerous small businesses. The fees charged by the Cornell Pay Clinic equal—if they are not greater than—the average fees charged under the Industrial Accident Law of California and many other States; yet in California private physicians and groups of physicians compete keenly for private business upon this basis. One group of physicians in California who performed last year just about the same volume of services as that performed by the Cornell Pay Clinic, rendered these services at a fee schedule—in the aggregate—less than Cornell Pay Clinic and made a profit of \$50,000 or more. Of course, enthusiasts may say that the quality of service rendered by Cornell Pay Clinic exceeded that of the private group of physicians in California. Nevertheless, that should not be much consolation for physicians to endorse and back up group medicine run by a university faculty upon any financial, or, for that matter, upon any other sort of scheme. The public certainly ought not be able to find a great deal of consolation out of a service for ambulatory patients that cost \$2.03 a service when a large percentage of the physicians of the United States are operating upon a fee schedule that does not go over this figure. We know very well that in California fully 50 per cent of the six thousand physicians in this State—many of whom have been educated in Cornell University—would be very glad indeed to be kept busy even half of their time with the class of patients who could pay \$2.03 for office visits. According to the report, the authorities of the Cornell Clinic attempted to handle a class of patients who were unable to pay the normal fee or private physician fee and yet who did not want to receive charity. Are people who pay \$1.57 a visit in this class? If they are, most of the people belong to it, and if the scheme were generally applied, we would not only have socialized medicine but very expensive socialized medicine. It is interesting to note that according to their statistics only 10,202 of the 22,409 patients who applied were classified as being in the group covered by the clinic. Four thousand five hundred and twenty people were rejected by this clinic because they could not pay \$1.57 a visit; only 322 out of the 22,000, however, were refused because they were adjudged able to pay fees of private physicians.

The report emphasizes the "close bond existing between the clinic and the medical profession." We would rather hear from the medical profession itself before accepting a statement of this character as one of fact. The closeness of the bond is indicated by another statement of the report whereby it is claimed that 824 doctors referred 1360 of their

patients to the clinic. This does not look like an exceedingly "close bond." Another advertised feature of the clinic is its service as a diagnostic clinic, and yet we notice that this had only 369 patients referred by physicians out of the total of 113,000 visits of all classes.

The report makes the statement that a considerable number of patients could not afford continued treatment even at \$1.57 a visit, and that they were, therefore, forced to carry them without charge or send these patients where they could have "free treatment." Of course, the economists who are working on the financial and organizational problems of the pay clinic know perfectly well that there is no such thing as "free treatment." What they mean, of course, is what other people mean when they talk about free treatment and that is, that the patient should be shifted to some place where the cost of treatment would be borne by somebody else. Usually these "free treatment" places are those that are supported either by taxation or by public contributions, and the costs of service are absorbed, or covered up or made innocent-looking to that part of the public that takes an interest in such matters. Altogether the report of the first year's work of the Cornell Pay Clinic does not warrant conclusions creditable to the movement. Some day the members of the medical profession will realize that there is only one kind of a clinic that should have 100 per cent of their endorsement and support, and that is the clinic that should exist in the office of every physician. The greatest need of medicine at the present time is for physicians and for the public to get the old-time conception of what a physician's office and physician's service mean to such an extent that they feel at liberty to apply to their physician whether they can pay or not, and expect to pay whatever proportion of legitimate fee they can pay, and expect to have the confidential, sympathetic, efficient service of the physician upon that basis. With one educated physician to approximately every seven hundred people in this country, if every physician's office were made a "clinic," a "health center," or, as it should be, a physician's office, everyone could have good medicine at what he could afford to pay. There would be no need for other clinics, and the physicians would still not be overly busy. If there is a place for the Cornell Pay Clinic or any similar monument in the scheme of things medical, it constitutes a serious indictment of the practices and policies of the medical profession.

JUDICIAL MATTERS

1. Another Lawsuit Against the Federal Maternity and Infancy Law.

With the action of the Commonwealth of Massachusetts against the federal officials who administer the maternity and infancy act pending the United States Supreme Court, another lawsuit against these officials was brought on December 20 by Harriet A. Frothingham in the Supreme Court of the District of Columbia. Mrs. Frothingham, who is a resident of Massachusetts, sues as a taxpayer of the United States and claims Congress exceeded its power in passing the legislation. She asserts that it interferes with state rights and personal liberty.

The state of Massachusetts has not accepted the provisions of the act and Mrs. Frothingham says she will be compelled to pay taxes toward the annual expense provided for in the bill, and thus be required to pay for advantages to other states. She says her right as a citizen has thus been invaded and violated. Congress has no power, the court is told, to enact such legislation, as it is wholly and exclusively within the jurisdiction of the several states. Congress also undertakes by this bill, it is stated, to delegate to the board of maternity and infant hygiene and to the Children's Bureau,

power to legislate with respect to the provisions of the bill, a power which cannot be delegated.

Named as defendants are the Secretary of the Treasury; Grace Abbott, Chief of the Children's Bureau; Hugh S. Cumming, Surgeon General of the Public Health Service; and John J. Tigert, Commissioner of Education.

2. A court decision on social hygiene.

Ex parte Carey, 207 Pac. R. 271

Facts. The Carey woman was arrested for solicitation on the streets of San Francisco, California, and committed by a police court to the California Industrial Home for Women in accordance with the provisions of a state law. She sued out a writ of habeas corpus (see Statement No. 37, p 5) but was remanded to the institution by the District Court of Appeal of the Third District of California.

Holding. The court held that the law was not discriminatory and that prostitutes were so dangerous to public health that their detention was proper. In the course of the opinion, these significant remarks appear:

"They (fallen women) present a greater single element of economic, social, moral and hygienic loss than is the case with any other single criminal class. Not only do they constitute a menace to the morals and social welfare of mankind, but they carry very unusually heavy pathological liabilities. In truth, from the standpoint of public health, they are sometimes referred to as pestilential and their places of abode as pest houses. The law declares them to be a public nuisance. Altogether, they present the most perplexing problem with which modern penology and social legislation are called upon to deal. The fallen women occupy a relation to society very analogous to that of the chronic typhoid carrier, a sort of clearing house for the very worst forms of disease. The right to quarantine persons suspected of contact with infection is usually upheld by both state and national governments. The right to quarantine at all implies the right to continue the isolation so long as danger remains. That a woman, carrying on a business denounced in the statute is a constant pathological danger, no one would question."

3. Failure to report communicable disease.

Moorehouse vs. Hammond, 209 Pa. R. 883.

Facts. A physician in a Utah town failed to report a case of smallpox in writing to the health officer, though he did report it orally. The director of registration with a committee of physicians held a hearing, found the physician guilty of unprofessional conduct and revoked his license to practice. The case was taken to the Utah Supreme Court, which set aside this revocation and restored the license.

Holding. The State laws of Utah require the reporting to the local board of health of infectious or contagious disease. The local ordinance required such reports in writing. The court held that this ordinance was without force because it imposed greater duties than the state law. It was likewise ineffective because it declared no punishment for failure to report. A statute or ordinance not having a penalty is unenforceable, says the court. The order of the director of registration therefore fails, as it is based on this law. Furthermore, the physician substantially complied with the statute by an oral report. In conclusion, the court states that it is reluctant to interfere with rules and ordinances of health boards, which represent the highest functions of government, but that the rights of a citizen must be protected.

Comment. This case brings out forcibly the necessity for carefully drawn State and local laws relating to health matters.—(National Health Council, Summary, January 1, 1923.)

STATE SOCIETY

ABSTRACTS FROM THE MINUTES OF THE 136TH MEETING OF THE COUNCIL OF THE MEDICAL SOCIETY OF THE STATE OF CALIFORNIA.

Held in San Francisco, Saturday, January 6, 1923.

The complete minutes of this and all other Council meetings are on file in the office of the State Society and are open to any member of the society.

Present: Brainerd, Edwards, Bine, Parkinson, Kress, Kiger, De Lappe, Ewer, Van Zwahlenburg, McArthur, Pope, McLeod, Parker, Paterson, Musgrave, Johnson and General Counsel Peart.

Absent: Hamlin and Carrington.

Appointment of Councillor for Sixth District—Upon nomination of Pope, seconded by Van Zwahlenburg, Walter B. Coffey of San Francisco was unanimously elected to fill the vacancy in the sixth district caused by the passing of C. G. Kenyon.

Reorganization of the Council—Upon nomination of Kress, seconded by Pope, James H. Parkinson of Sacramento was unanimously elected chairman of the Council to succeed C. G. Kenyon, deceased.

Passing of C. G. Kenyon, chairman of the Council—Upon motion of Van Zwahlenburg, seconded by Paterson, it was

Resolved, That the chairman of the Council appoint a committee of three to draw up a resolution on the passing of Doctor C. G. Kenyon.

Chairman appointed Edwards (chairman), Van Zwahlenburg and Paterson as members of this committee.

Hotel Headquarters for State Society and A. M. A. Meetings in June, 1923—The associate secretary reported that tentative arrangements had been made with the Hotel Whitcomb for the reservation of fifty rooms for accommodation of the Council and Society officers during the State and A. M. A. meetings in June.

Action by the Council: Upon motion of Van Zwahlenburg, seconded by Kress, it was

Resolved, That the Hotel Whitcomb be made hotel headquarters for the State Society during the State and A. M. A. meetings in June, 1923; and further, that the secretary be instructed to make reservations for all members of the Council.

Articles of Incorporation of State and County Societies—The question of incorporating the State and county societies was discussed by the general counsel, who advised that nothing be decided upon unless under some uniform plan which had the approval of the A. M. A. He stated that there was no present need for incorporation of the State Society. Regarding incorporation by a county society, he suggested that any thereof might incorporate if they so desired, such corporation to be empowered to hold real or personal property for the Society. It was the sense of the Council that this matter should be referred to the general counsel for report as to form or method and desirability of such procedure.

Action by the Council: Upon motion of Kress, seconded by Bine, it was

Resolved, That the general counsel ascertain the present form and method of incorporation of the Los Angeles County Medical Association, and further, that he use such information in the preparation of uniform articles of incorporation for the assistance of other county societies desiring to incorporate.

Incorporation of the Indemnity Defense Fund—General counsel reported the present status of the Fund; the results of the letter sent to all members of the Fund on December 18, 1922, regarding the contemplated incorporation, and explained fully why it appeared necessary and advisable to incorporate the Fund. This matter was also discussed by Dr. Duffield and others.

Action by the Council: Upon motion of Kress, seconded by Bine, it was

Resolved, That the chairman appoint a committee of five, consisting of three members of the Board of Trustees of the Indemnity Defense Fund and two members of the Council, which committee shall act as "attorneys in fact" under the proposed "power of attorney" submitted by the general counsel; that the form of proposed "power of attorney" submitted by the general counsel be approved; and that the publicity bureau and said committee and the officers of the Society be authorized to proceed with the work of fully informing all members of the Fund of the incorporation plan and considerations relating to same in order to determine the wishes of the members of the Fund in reference to incorporation.

The chair appointed Lemuel P. Adams, W. E. Briggs, William Duffield, W. T. McArthur and Saxton T. Pope.

Policy Regarding Credit to Editorial Writers—The question of co-operation between scientific sections and the State Society was discussed particularly with reference to the furnishing of editorials by the sections for the State Journal. It was the sense of the Council that no credit should be given to editorial writers, but that the editorial section of the Journal should remain as it is at present—impersonal and representing the policies and opinion of the entire organization.

Question of Dividing the United States into Territorial Districts—The secretary discussed the advisability of dividing the United States into territorial districts as

contemplated by the A. M. A. at the St. Louis annual session.

Action by the Council: Upon motion of Paterson, seconded by Kress, it was

Resolved, That the chair appoint a committee of three to investigate the matter of dividing the United States into territorial districts, from the standpoint of the Medical Society of the State of California, and further, that this committee report to the Council and the House of Delegates at the coming annual meeting.

The chair appointed Paterson (chairman), Kress and Pope.

Industrial Medicine—Parkinson, chairman of the Industrial Accident Committee, read a letter just received which stated that the proposed fee schedule was not yet completed, or in shape for presentation to the Council. He stated that his committee hoped to have the proposed plan and fee schedule ready for presentation to the Council at its next meeting.

Parkinson then read a letter from the secretary of the Los Angeles County Medical Association enclosing a resolution passed by the Industrial Accident Section of the Los Angeles County Medical Association, together with correspondence addressed to the State office by the secretary of the State Section on Industrial Medicine and Surgery.

Upon motion of Kress, seconded by McArthur, it was

Resolved, That the secretary of the Section on Industrial Medicine and Surgery of the State Society be called in to present the views of his section on this subject.

Resolution of Industrial Accident Section, Los Angeles County Medical Association—Thurber then presented the views of his section to the Council. A general discussion of the subject followed. It was the sense of the Council that Thurber be authorized to carry the assurance of the Council of the State Society to his section, that any plan and schedule relating to industrial accident work would be submitted to the entire Society membership for consideration and that this had always been the intention of the Council, and that, until the Industrial Accident Section had been given an opportunity to study and pass upon the plan and schedule the proposed plan and fee schedule would not be adopted by the Council.

Journal Editorials—The following editorials were considered for publication in the California State Journal of Medicine: "Sheppard-Towner Law," "Medical Ethics Not Changed by Election."

Action by the Council: Upon motion of McArthur, seconded by Van Zwahlenburg, it was

Resolved, That these editorials be published in the February issue of the California State Journal of Medicine.

The question of furnishing county societies with copies of the editorial on "Medical Ethics Not Changed by Election" was fully discussed.

Action by the Council: Upon motion of Kress, seconded by McArthur, it was

Resolved, That the secretary-editor have printed 500 copies of the editorial on "Medical Ethics Not Changed by Election," and further, that these reprints be sent in appropriate numbers to the county societies as an expression of the attitude of the Council on this subject.

Financial Statement and Audit for Year 1922—The associate secretary read the yearly financial statement and report of audit by Klink, Bean & Co. for the year 1922. The Council ordered copies of these papers sent to each of the councillors.

EARLY TRANSACTIONS OF STATE SOCIETY

A few observations from the transactions published during the early years of this Society's existence. On October 19, 1870, Dr. T. M. Logan, of Sacramento, delivered an address before The State Medical Society of California, in which he said, among other things, the following:

"Fourteen years ago, in association with the lamented Cooper, who was the leading spirit of the occasion, I officially signed the call, as corresponding secretary of the Medical Society of Sacramento, for a convention in that city, to inaugurate the scheme which we are now assembled to resuscitate. The objects for which the State Medical Society was formed did then, as they do now, enlist my warmest interest and command my active co-operation; and, judging from the intelligent—many of them old familiar—faces around me, I have reason to believe that I entertain these views and professions only in common with you all.

"Prior to this organization, as most of you well remember, the medical mind was in a state of inertia—the profession in a chaotic condition. The dominant materialism of the Golden Age, which had invaded every department of human activity, and inverted the natural order of things by subjecting the higher to the lower, was degrading medicine into a mere business, leading men of real ability, who might have been remembered as benefactors of their

race, to spend their noble energies in building up an extensive practice. . . .

"Had the State Society done nothing else than conserve its subsequent transactions through publications, it would have performed a service entitling it to an imperishable name in the medical annals of our country. But it has done more than this; and we proudly point, among its results, to our medical colleges, our monthly periodicals, our numerous local societies, our municipal boards of health. . . .

"The 'American Medical Association' are coming to kneel side by side with us at a common altar, and pour the acquisitions of their devoted lives into a common treasury. At the sacrifice of their time and business—foregoing all the comforts and endearments of home, and subjecting themselves, on their way hither, to the hazards incident to the velocity of locomotion at the present day—they are coming from every portion of this great continent."

At the close of Dr. Logan's address, Dr. A. B. Stout, of San Francisco, moved that this convention organize itself into the State Medical Society. This motion was carried. The committee on credentials reported 101 names of physicians, with residence, school and date of graduation, as being present, and after some discussion the chair stated that all of those whose names had been reported were permanent members of the State Medical Society.

As an indication that all was not absolute peace and harmony among California physicians even in those days, the following is taken from the transactions of those minutes:

"A member from the interior having, in the course of remarks, referred to the profession in San Francisco as bearing the reputation of being divided into hostile cliques, Dr. H. Gibbons, Sr., requested the privilege of correcting the error. He said the great body of physicians of the city were in perfect harmony; that, as a matter of course, among so many there were a few natural growlers, who seemed to take great pleasure in giving a bad name to the body; but that the two medical associations in this city enjoyed the most perfect harmony—both in their own membership and in regard to each other. Differences of a personal or professional character were really very uncommon among the physicians of San Francisco."

At the evening session Dr. T. M. Logan of Sacramento was elected president; vice-presidents, S. R. Harris, of San Francisco; T. H. Pinkerton, of Oakland; J. L. Ord, of Santa Barbara; G. A. Shurtless, of Stockton; and D. B. Hoffman, of San Diego; corresponding secretary, George Hewston, San Francisco; recording secretaries, A. B. Nixon left, of Stockton; and D. B. Hoffman, of San Francisco; treasurer, A. B. Stout of San Francisco.

Of interest in connection with the recognition of women physicians by the medical profession is the following resolution introduced on the second day of that meeting by Dr. Hoffman of San Diego:

"Resolved, That all persons, of either sex, who possess the qualifications prescribed by the Constitution may become members of this society.

"On motion of Dr. Stout, the resolution was laid on the table."

The question of physicians being called into court as experts and witnesses was acute even at that time, as is shown in the following:

"Dr. H. Gibbons, by permission, gave a brief and forcible address on the annoyances and pecuniary and professional sacrifices the members of the medical profession are frequently obliged to endure in being called into courts of justice as experts and witnesses, and to make post-mortem examinations, without just recompense for the same. He moved that a committee of three be appointed by the Chair to examine into the subject, and report at the next annual meeting. Carried." At this time also, Dr. Hays offered the following resolution:

"Resolved, That a committee of three be appointed by the Chair, to secure the passage of an

amendment to the laws organizing the State Board of Health, to enforce the registration of deaths, births, etc., to enable the Board of Health to secure more complete statistics in relation thereto. After a spirited discussion, the resolution was lost."

It seems that there was considerable enthusiasm regarding the advisability of cultivating the cinchona tree in the United States, which was covered in the following resolution by Dr. Stout:

"Resolved, That a committee be appointed to address the Legislature of California and petition that honorable body to appropriate ——— acres of land, situated in ———, for the cultivation of the cinchona tree, in accordance with the memorial of the American Medical Association; and also for the creation of a botanical garden."

The Medical Society of the State of California was incorporated on the first day of November, 1870, in the following language:

"We, the undersigned, residents of the State of California and of the United States of America and citizens thereof, and representing as its executive officers, the members of the Medical Society of the State of California, do hereby certify that, under and by virtue of 'An Act of the Legislature concerning corporations for charitable and beneficial purposes,' approved April 4, 1870, we have associated ourselves into an incorporate body or society, which shall be known as The Medical Society of the State of California.

"The objects of said society shall be in conformity with an adopted and published constitution in the year 1856, to take cognizance of the common interests of the medical profession in the State of California."

"Regular meetings shall be held annually on the second Wednesday of October. The county and place of meeting, in the State, of said organization shall be determined for each next succeeding year by vote of the society. There shall be no established office or principal place of business for the said corporation, which shall exist for an indefinite term in accordance with the will of the majority of the members from the date of the filing of this certificate.

"In Witness Whereof we have hereunto set our hand and affixed our seals, as well as the seal of our society, this first day of November, A. D. 1870.

"(Corporate Seal)

"Thos. M. Logan, President (L. S.); A. B. Nixon, First Secretary (L. S.); Henry Gibbons, Jr., Second Secretary (L. S.); George Hewston, Corresponding Secretary (L. S.); Arthur B. Stout, Treasurer (L. S.)."

At the meeting of the society, October, 1871, the roll-call showed 153 members, representing almost every county in the State. During this meeting Dr. Montgomery of Sacramento offered the following resolution regarding ethics, which was adopted:

"Resolved, As the sense of this society, that the subject of medical ethics should receive a larger share of attention in the medical universities and colleges of the country, to the end that the true principles inculcated therein may be more thoroughly impressed upon the minds of the students, and, in consequence, more faithfully and scrupulously observed by them in their subsequent professional career."

Dr. Cole of San Francisco offered a resolution on requirements for membership which would be more effective and more nearly correct than the requirements of some organizations of the present day:

"Resolved, That the Board of Censors shall recommend no candidate for membership until he shall have presented his diploma or other evidence of being a graduate of a recognized school, and of good standing; and that no voucher of a single member shall be considered sufficient evidence of his qualifications."

The president's annual address at a banquet in the year 1871 is a valuable and interesting review of past attainments of the medical profession and

predictions regarding its future. Many of the predictions made at that meeting are still predictions today. One statement contained in the annual address of the president that is still being repeated by the profession is interesting enough and applicable enough to today's problems to quote:

"Now this condition (lack of publicity) of things should not exist, and the question arises what is to be done? I reply, let us educate the masses—this is our work for the future.

"Too long for our interest and that of our race have medical men ignored this important duty. So filled with dignity has the profession been that they could not stoop to approach the people through the main channels by which they can be reached—the daily press and public lecture room. 'With dull apathy we have seen the followers of most other professions seeking to avail themselves of these elements of power, some for good, some for evil. The clergyman has not trusted alone to supernatural power in keeping alive the truths of revelation and arousing in the people a due respect for its lessons. They have watched with 'jealous care' the education of the young, and from the Sabbath school to the university they exercise the greatest control. And legislators, through their political organizations, public speeches and control of the press hold the masses, as it were, in the hollow of their hands.'"

We will close this very brief, sketchy reminder of other days in medicine by a brief abstract from an address of the annual meeting of the society in 1874 by President T. H. Pinkerton:

"The fool of Nottingham being asked by his master what profession or calling had the greatest number within its ranks in that town, replied: 'Truly, master, I think there be many more physicians in Nottingham than men of any other pursuit.' 'A very fool thou art,' replied his master; and the fool rejoins, 'I will prove what I have said.' He was encouraged to do so by the promise of a gold piece. So he went about the town with his face tied up as if suffering from a dreadful toothache. Everybody he met pitied him; everybody, too, prescribed for him; he noted their names and their nostrums. Being seen last by his master and getting his prescription, he submitted the whole list, and his master acknowledged that he had proved his saying.

"Can anyone of us doubt that a similar investigation would lead to the same results in our own day and in the towns or cities in which we live? Is there not even reason to believe that the number of those who depend upon regularly educated physicians for counsel and advice is less among us than in other countries and other times? The precocious habits of our country have, of course, been felt in the medical profession."

Is This Limited to Indiana—Many doctors are members of churches and various organizations supported or sponsored by churches, and such doctors have a right to protest against the attitude of the various religious organizations that through their officers are upholding and actually working for some of the pseudo-medical cults. Some of the leaders in the Y. M. C. A. and Y. W. C. A. activities actually are "tooting" for chiropractors who at the present time are lawbreakers, to say nothing of being incompetent, yet these same ringleaders in Y. M. C. A. and Y. W. C. A. work are soliciting endorsement and financial support from reputable members of the medical profession. We have no objection to the preferences shown by ministers, Y. M. C. A. or Y. W. C. A. secretaries for legalized and reputable practitioners of medicine, but we do think that it is time for withdrawal of support of those religious workers when they not only uphold quackery, but actually work for quackery's advancement. If the Church and various religious associations, as organizations or through their officers, are going to support the pseudo-medical cults and quackery, then it is time for the regular medical profession to withdraw its support from such organizations.

COUNTY NEWS

LOS ANGELES COUNTY

Los Angeles County Medical Association elected the following officers at its annual meeting:

Officers for the Year 1923—William H. Gilbert, president; Joseph K. Swindt, vice-president; Harlan Shoemaker, secretary-treasurer.

Councillors—Carl Rand (1923), W. H. Kiger (1923), Rea Smith (1923), Walter V. Brem (1924), Wm. Bowman (1924), A. S. Granger (1924), Donald Frick (1925), Lyle G. McNeile (1925), J. Mark Lacey (1925); Paul A. Ferrier, Pasadena; John P. Nuttall, Santa Monica; E. E. Kelly, Pomona; Chas. G. Foote, Long Beach; Frank Detling, Eye and Ear Section; Wm. H. Gilbert, Obstetrical Section; Granville MacGowan, Urological Section; R. F. Has-treiter, Anesthesia Section; Irving Bancroft, Dermatologic Section; H. G. McNeil, Industrial Medicine Section; F. M. Pottenger, Tuberculosis Section; Franklin J. Tower, Southwest; Raymond G. Taylor, Radiological Section.

Trustees—Donald J. Frick (1925), Ray G. Taylor (1925), Fitch C. E. Mattison (1925), W. T. McArthur (1924), Wm. Duffield (1924), Wm. H. Gilbert (1923); Harlan Shoemaker (1923), secretary.

Medico-Legal Committee—Charles D. Lockwood (1923), Walter V. Brem (1924), Theodore Lyster (1925).

Permanent Quarters—F. C. E. Mattison (1923), Hill Hastings (1924), Wayland Morrison (1925).

Hospital Standards—Dudley Fulton (1923), E. C. Moore (1924), Clarence Toland (1925).

Industrial Accident and Contract Practice—Chas. C. Browning (1923), W. W. Richardson (1924), H. G. McNeile (1925).

Illegal Practitioners—R. E. Ramsay (1923), Frank W. Miller (1924), W. B. Kern (1925).

Mal-Practice Defense Committee—J. Scott Brown (1923), E. M. Pallette (1924), A. B. Cecil (1925).

Library Committee—Wm. Duffield (1923), W. Jarvis Barlow (1924), Nelson W. Janney (1925).

Appointed by President

Scientific Program—Harlan Shoemaker, chairman; Wilbur Parker, Harry Olds.

Aid to Colleagues—Charles C. Browning, chairman; W. W. Hutchinson, George J. Lund, J. C. Horton, Olga McNeil, Robert A. Walker, Alhambra; F. M. Pottenger, Monrovia.

Committee for the Study of Fee Schedules—J. V. Barrow, chairman; J. Mark Lacey, Oscar Reiss, Philip Boller, E. H. Wiley.

Committee on Lay Medical Activities—Walter Huggins, chairman; O. R. Stafford, Clifton E. Gage, W. Edgerton Carter, C. H. Weaver, W. E. Hall, Harry Voorhees.

Public Health—W. T. McArthur, chairman; E. C. Moore, John Irwin, Wm. J. McKenna, Albert C. Germann, Karl Sleeper, A. H. Zeiler, M. M. Ross, Eleanor Seymour, J. L. Pomeroy, Donald Baxter, Irving Bancroft, Ernest G. Butt, Redondo Beach; Charles Bennett, San Dimas; A. T. Newcomb, Pasadena; Paul Roes, Hollywood; F. L. Rogers, Long Beach; J. K. Swindt, Pomona; John P. Nuttall, Ocean Park; H. P. Wilson, Whittier.

Co-operation with Allied Organizations—Edward T. Dillon, chairman; William Bowman, George Piness, Henry B. Lissner, Stanley Granger, R. V. Day, Charles Lockwood, Michael Creamer.

The Relationship of the Medical Profession to the Eighteenth Amendment—R. L. Crum, chairman; James F. Holleran, Lloyd Mills, Neal N. Wood.

Speakers' Bureau—T. J. Orbison, chairman; William Duffield, W. J. Haworth, Earl Sweet.

Committee on Medical Education—Walter Brem, chairman; Donald Frick, Theodore Lyster, Percy T.

Magan, W. A. Beckett, Sydney Burnap, Wayland Morrison.

Los Angeles County and Receiving Hospitals and Out-patient Dispensaries—C. G. Toland, chairman; Barney C. Coleman, A. J. Scott, Jr., C. G. Stadfield, Simon Jesberg, William H. Daniel.

Committee on Scientific Organization of Medical Practice—Dudley Fulton, chairman; P. G. White, J. Morris Slemmons, Walter Crane, H. W. Spiers, Andrew Stewart Lobingier, Harold Smith, Henry Snure.

Delegates and Alternates for State Meeting—Delegates 1923—Donald Frick, Harlan Shoemaker, Granville MacGowan, J. Mark Lacey, Walter Huggins, Carl Rand, Raymond Taylor, Wm. Bowman, Chas. C. Browning, John P. Nuttall, A. S. Granger, Walter V. Brem.

1923-1924—Wm. H. Gilbert, A. J. Scott, Jr., H. G. McNeil, F. A. Speik, Packard Thurber, Phillip Stephens, O. I. Tower, T. C. Myers, A. H. Zeiler, Joseph K. Swindt, E. M. Pallette, C. D. Lockwood, Lyle G. McMeile.

Alternates 1923—Jos. M. King, F. C. Swearingen, Carl H. Parker, Wallace Reed, H. H. Heylman, Harriman Jones, F. L. Morgan, C. G. Toland, John Mackey, Roland Cummings, Henry B. Lissner, J. G. Lynch.

1923-24—A. W. Moore, Michael Creamer, LeRoy Sherry, Elmer Kelly, A. R. Rogers, John P. Nuttall, Percy T. Magan, A. T. Newcomb, Robert Day, J. B. Gillis, John Barrow, V. R. Mason, Isaac H. Jones.

MARIN COUNTY

Marin County Medical Society (reported by Chester A. De Lancey, secretary)—The regular business meeting for the month was held on December 14 at the offices of W. F. Jones in San Rafael. The following officers were chosen for the ensuing year: President H. A. Howitt; secretary, C. A. De Lancey; delegate, J. H. Kuser; alternate, A. H. Mays; trustees, Kuser and Howitt. F. V. Simonton, associate professor of Dentistry at the University of California, addressed a meeting of the physicians and dentists of Marin County under the auspices of the Marin County Medical Society. Simonton chose as his subject, "Histologic Study of Result Obtainable Through Instrumental Treatment of Pyorrhoea." Warden J. J. Johnston, who was a guest of the evening, discussed disease as a potential factor in crime and stated that fully 95 per cent of all entrants to San Quentin needed dental treatment.

MERCED COUNTY

Merced County Medical Society (reported by Brett Davis, secretary)—The first of the 1923 monthly meetings was held January 1. New officers elected for the year are: President, W. C. Cotton; vice-president, A. S. Parker; secretary-treasurer, Brett Davis; delegate to State convention, E. R. Fountain; alternate, B. H. Bush. T. R. Trick, Los Banos, was elected to membership. W. C. Cotton reported the results and case histories of two unusual operative cases of gall bladder disease, which were discussed with profit to all present. Doctor Davis also reported two gall bladder cases with operative histories. Hospital affairs and the subject of a full time health officer for the county were discussed.

RIVERSIDE COUNTY

Riverside County Medical Society (reported by Thomas A. Card, secretary)—The Society met December 11 in the Chamber of Commerce rooms, with 25 members and 15 visitors present. The following officers were elected for 1923: President, A. L. Bramkamp; Vice-President, Will H. Holmes; Secretary-Treasurer, Thomas A. Card; Ethics Committee, Brown, Dickson, Wills, West and Shank. Chas. W. Girdlestone, Riverside, gave a paper on Treatment of Pneumonia. Discussion was opened

by A. L. Bramkamp of Banning. This was followed by a symposium on Arterial Hypertension, (a) Etiology, A. N. Donaldson, Loma Linda; (b) Pathology, Newton Evans, Loma Linda; (c) Treatment, D. D. Comstock, Los Angeles. Discussion opened by Arthur L. Brown, Riverside. The Society were guests of Geith, Girdlestone, Gordon, Hall, Holland and Holmes at a buffet luncheon served at the close of the meeting.

SAN DIEGO COUNTY

San Diego County Medical Society (reported by Robert Pollock)—Following is the list of officers of the San Diego County Society for 1923: President, J. E. Jennison; Vice-President, A. B. Wessels; Secretary, L. H. Redelings; Treasurer, C. L. Stealy; Editor, Robert Pollock.

Council—Wessels, chairman; Arnold, Jennison, Pickard, Pollock, Redelings, Stealey, Thornton, Willier, Worthington.

Membership Committee—Arnold, Tanner, Cleverdon.

Program Committee—Cornell, Thornton, Doria. Medico-Legal—Banks, Jackson, Lesem.

County Hospital—Kinney, Rees.

Child Welfare—Marjory Potter, Martha Welpton, Lillian Mahan, E. Blanche Ramer.

Committee for New Hospitals—Oatman, Churchill, Burger, Fox, Lewis.

Legislative Committee—Yates, Carrington, Harding, Worthington.

The annual meeting of the society for 1922, together with the San Diego County Dental Society, was held December 12, at the San Diego Hotel. A turkey dinner was served at 6:30 in the grill to which were invited the Commanding Officer of the Naval Hospital and his staff and the ladies of the medical and dental professions.

The entertainment of the evening, which consisted of a pleasing program of music, radio and the reports of the retiring officers, was given in the ballroom on the seventh floor, after which dancing was enjoyed until a late hour.

Things look bright at the present time for the inauguration of two or three new hospital movements in greater San Diego within 1923.

The first meeting of the New Year was held in Science Hall, Balboa Park, January 9. Besides the conducting of considerable miscellaneous business referred by the council, the following excellent program was presented:

1. Heart Disease from a new viewpoint, by R. K. Barry. This unique presentation of a vital subject was listened to with extreme interest, but from its very nature permitted of but little discussion. Barry is to be commended for holding the ideals of the heart specialist constantly before and above us in such a way as to invite a higher standard of our work along circulatory lines.

2. Malignant Disease from a Roentgenological Standpoint, by E. A. Blondin. This paper was profusely illustrated by lantern slides, disclosing chiefly cancers of the esophagus and stomach. The rich experience which Blondin has had in diagnosis and treatment of cancer of the esophagus makes one feel that this is a much more common seat of malignancy than ordinarily conceded. Many points of practical value from the roentgenologist's standpoint were brought out. This paper was discussed by Weiskotten, Pollock and Newman.

3. Pasteur's Contribution to Medical Science, by R. A. Kocher. The centenary of the birth of Pasteur was recognized in tribute to the work of this great scientist with a graphic portrayal of the strong points in the character and the outstanding accomplishments of this great scientist, the man to whom we owe in a large measure our start toward making of medicine an exact science.

St. Joseph's Hospital.—The Bulletin of the San Diego County Medical Society contains the following note:

"The annual election of officers was held two

weeks ago at the regular meeting of the staff of St. Joseph's Hospital. L. C. Kinney was elected president of the staff, A. B. Wessels, vice-president, W. W. Russell, secretary; and J. Jennison, member of the executive committee.

H. A. Thompson, M. C. Harding and C. E. Rees have been appointed members of the advisory committee to serve with the elected officers for the coming year.

The laying of the cornerstone for the new St. Joseph's Hospital has been postponed until March, 1923, on account of delay in completion of the plans.

SAN FRANCISCO COUNTY

San Francisco Medical Society (reported by J. H. Woolsey, secretary)—The committee on Medicine conducted the meeting of December 5 on the subject of "The Cults." Papers were read by Edward W. Twitchell on "Psychotherapy Cults," and J. T. Watkins on "Physical Therapy Cults."

The annual meeting was held December 12 and the following officers elected: President, Sol. Hyman; first vice-president, W. W. Boardman; second vice-president, Elizabeth Keys; secretary-treasurer, J. H. Woolsey; librarian, Leo Eloesser, Board of Directors: H. E. Alderson, Jos. Catton, Leo Eloesser, J. H. Graves, E. S. Kilgore, A. C. Reed, Emmet Rixford. Terms expire December, 1925. (Elected Dec. 1922.)

Delegates 1923-4

H. E. Alderson, L. H. Briggs.

Committees

Executive Committee—T. H. Kelly, chairman; Paul Castelhun, W. T. Cummins.

Committee on Admissions—O. F. Westerfeld, chairman; A. S. Musante, H. E. Ruggles.

Committee on Medicine—J. M. Read, chairman.

Committee on Surgery—L. D. Prince, chairman.

Committee on Industrial Medicine—R. W. Harbaugh, chairman.

Committee on Eye, Ear, Nose and Throat—E. F. Glaser, chairman.

Civic Committee—R. K. Smith, chairman; M. R. Gibbons.

Papers were read by J. H. Kelly on "The Clinical Significance of Thoracic Pain"; by J. W. Shiels on, "The Clinical Significance of Thoracic Fluid"; and by Saxton Pope on "Ishi, Last Yana Indian, and Stories of Hunts with the Bow and Arrow."

On December 19, the committee on industrial medicine furnished the program with, "Some Observations on Traumatic Dislocations of the Hip," by J. T. Watkins, and, "Results Following Experimental Excision of Joints with Special Reference to the Hip," by J. F. Cowan.

The following abstracts of papers presented at these meetings have been received:

"Psychotherapy Cults," by E. W. Twitchell. In early medicine the psychic element was the important one by reason of the inadequacy of material therapy. With the improvement of material therapy came a neglect of the mental, this being delegated to the priest.

The increasing complication of modern life has increased the relative frequency of nervous disease and necessitated more attention from the physician. Failure of some of the earlier regimes, such as the Weir-Mitchell treatment, to give sufficient heed to the emotions and the imagination. The war added an immense number of nervous persons to those already needing care. Coue, like all other lay therapists, fails to distinguish the case which might properly be treated by him from the one which he may irreparably damage.

There is need of a better foundation in psychology for the medical student and a more thorough training in psychiatry. If physicians do not pay more attention to the psychological side of medicine, many of their patients will continue to seek relief from some of the lay psychotherapists.

"The Clinical Significance of Thoracic Fluid," by J. W. Shiels—J. Wilson Shiels' remarks regarding the significance of thoracic fluid were couched in more or less axiomatic form. This due to the shortness of time allowed to the subject. He enlarged upon the clinical necessity of keeping the pulmonary attributes of extensibility ever in mind, during the physical examination of the respiratory system. He considers it a misdirection of clinical ability to contemplate thoracic fluid as always associated with a pleural pathology. He declared nearly all of the pulmonary diseases sooner or later present pleural effusion. He recognizes the necessity of differentiating transudates from exudates, but considers cyto-diagnosis misleading or unavailing, unless associated with other clinical facts. He then considered and enlarged upon the classification of purulent fluid utilized by him as a surgical indication. He emphasized that natural fluid absorption depended upon the integrity of the pleura, the nature of the effusion, the state of the circulation and the formation of enzymes, and of course, costal movement; stating that the more elastic the chest and the more the movement the easier the absorption. The higher the pressure the slower the absorption. That pleural pressure was seldom positive at high levels of fluid and that elastic chest walls controlled the degree of position pressure at low levels, thus accounting for the ease with which young children are able to contain and bear large amounts of fluid.

Shiels declared that an average fall of systolic blood-pressure of 20 mm. of mercury took place, but that it was not a serious complication unless the pleura was inflamed, and if the pleura was definitely inflamed, the possibility of circulatory collapse was always present, and the use of atropine was of value in such cases. He emphasizes the fact that all forms of pneumonitis, pneumonia, abscess, infarcts, embolism, tumors, malignant or otherwise, frequently gave early fluid in the pleural cavity, and that all of these conditions were as a rule demonstrated by a chronic inflammation of the lung, with dyspnoea, pain, fever, sputum, cough and effusion. He enlarged upon the difficulty in differentiating between supra and infra-pleuritic inflammation and its consequences. He warned his hearers against excluding appendicitis on account of right basal crepitations. He credited the X-ray with the teaching and education of clinicians in disorders such as intralobular pleurisy, mediastinitis, and supra and infra-pleuritic collections.

San Francisco Academy of Medicine—R. G. Hoskins, Professor of Physiology in Ohio State University, gave an address before the San Francisco Academy of Medicine on the 15th of January. Hoskins' subject was "Constructive Endocrinology."

The Work of Mary's Help Hospital of San Francisco for 1922—The Sisters of Mary's Help Hospital have just issued a little pamphlet giving a summary of the work of the institution during the past year. The hospital admitted 4087 patients and discharged 3880. There were 1784 operations, over 6000 laboratory examinations and 2270 X-ray services. 291 patients were treated in the hospital free of cost and 191 paid something, but less than cost. The ambulatory patient department rendered services to 12,007 patients, made 703 visits and filled 2946 prescriptions. Practically all of the patients treated in this department paid nothing at all. The Sisters expressed their gratitude for the splendid work of the staff and visiting physicians, whose generous co-operation made such an extensive amount of free work possible. The staff of the hospital is now well organized by departments holding regular meetings and making progress in every way in the betterment program in which they are actively engaged. Sister Zoe, R. N., is superintendent; A. S. Keenan is president of the staff, and N. J. Gottbrath secretary of the staff.

St. Joseph's Hospital Building Annex—The activities of construction are again evident at St. Joseph's

Hospital of San Francisco, the Sisters having signed a contract for the building of an annex to house the increased number of student nurses and, later, afford available rooms for patients, when the main structure is torn down, to make way for the second and principal concrete unit, rooms will be used in the annex, which will provide 48 beds.

The first fireproof unit was completed two years ago at an expense of \$150,000, and the next unit is to cost about \$350,000. When the new St. Joseph's Hospital is completed there will be available 300 beds on a site unexcelled for a general hospital. The location selected by the Franciscan Sisters of the Sacred Heart thirty-three years ago is free from noise, dust and smoke, an ideal condition for such an institution, and is, at the same time, accessible by street cars and automobiles, a beautiful boulevard leading to the doors.

The coming meeting of the American Medical Association, to be held in San Francisco, June 25 to 29, assumes a special importance to the staff of this progressive institution, on account of the subject of accrediting St. Joseph's Hospital for the interne year of medical graduates by the Council on Medical Education and Hospitals of this leading national association of physicians and surgeons.

SAN JOAQUIN COUNTY

San Joaquin County Medical Society (reported by Dewey R. Powell, secretary)—The annual meeting of the San Joaquin County Medical Society was held in the banquet room of the Hotel Lincoln, Friday evening, December 8. There were forty-seven members in attendance, which made it the largest gathering ever held under the auspices of the society. A most enjoyable repast was served, and the annual election of officers resulted in the following selections: President, Dewey R. Powell; first vice-president, L. R. Johnson; second vice-president, J. W. Barnes; secretary-treasurer, H. S. Chapman. The guest of the evening was Herbert C. Moffitt of San Francisco, who gave a most thorough and illuminating paper on "Intra-abdominal Tumors of the Left Upper Quadrant."

San Joaquin County Medical Society (reported by H. S. Chapman, secretary)—The regular monthly meeting of the San Joaquin County Medical Society was held in the State Hospital, January 12. R. T. McGurk presided in the absence of the president, D. R. Powell.

Those present were Dameron, Barnes, Lynch, Dozier, O'Donnell, McGurk, Holliger, Walker, Friedburger, English, Haight, Margaret Smythe, Sanderson, Chapman, and Blinn and Van Meter as guests.

Speakers of the evening were Emmet Rixford, Professor of Surgery, Stanford University Medical School and Ralph Scheier.

Emmet Rixford had as his subject "Appendicitis." He gave a very interesting resume of the early history of the disease, the early work done by Reginald Herbert Fritz, a Boston pathologist. He also spoke of the work done by W. W. Keen. He next discussed drainage tubes, fistula and diverticulitis. The paper was most interesting and all present went away feeling that they had learned something more about the appendix.

Second paper of the evening was by Ralph Scheier. He spoke on the importance of the early diagnosis of tuberculosis. He gave as the most important symptom or group of symptoms of the early diagnosis, as the constitutional symptoms. The instability of pulse and temperature are very indicative of an early tuberculosis, and even if the sputum is negative the patient should be carefully watched. One sputum examination is not sufficient, and at least ten should be made. Baccilli are frequently found in the tenth specimen. He also demonstrated the type of breathing. His outline of treatment is rest and more rest. Not so much where one lives

as how one lives, was his idea of climatic conditions. A very interesting discussion followed the paper.

SAN LUIS OBISPO COUNTY

San Luis Obispo County Medical Society (reported by G. David Kelker, secretary)—The December meeting of the San Luis Obispo County Medical Society was preceded by a dinner at the Hotel Andrews, with the following members present: Miller, Shields, Jackson, Bradbury, Mugler, Fossum and Nielsen of San Luis Obispo, and Dresser, Wilmar and Kelker of Paso Robles.

In addition to routine business to come before the society, the following officers were elected to serve during 1923: President, R. O. Dresser, Paso Robles; vice-president, O. B. Fossum, San Luis Obispo; secretary-treasurer, G. D. Kelker, Paso Robles.

The following standing committees were appointed by the retiring president, B. Y. Miller: Board of Censors, Bradbury, Mugler, and Wilmar; Auditing Committee, Wilmar, Dresser, and Kelker.

Headquarters of the new County Health Organization for San Luis Obispo County have been established at 1128 Garden street, San Luis Obispo. All classes of communicable diseases occurring in the county will be reported through that office. This organization is aided and fostered by the Rockefeller Foundation and is one of three being established in this State. Some of the important activities of such an organization are: Public health education, sanitation, control of communicable diseases, and adult and child hygiene.

SANTA BARBARA COUNTY

Santa Barbara Cottage Hospital Holds Annual Banquet in Connection with the Annual Clinic Day—The clinics were divided into three major groups: eye, ear, nose and throat clinics, consisting of six different clinics by different physicians. The surgical clinic lasted throughout the day; the medical clinic started at noon and continued during the rest of the day. The program included a great deal of most interesting work of value to the cause of better medicine. The banquet was held in the evening at a local hotel. This is the second year for this combined clinic day and banquet. Franklin R. Nuzum was general chairman of the day; Samuel Robinson, chairman of the surgical section; Allen H. Williams, chairman of the medical section, and William J. Mellinger, chairman of the ear, nose and throat sections. The officers of the County Medical Society, S. J. Mellinger, H. L. Schurmeier, J. C. Cummings, W. T. Lucas and Alexander Soper, assisted in making this day one of interest to the profession and value to the community.

SANTA CLARA COUNTY

Santa Clara County Medical Society (reported by E. P. Cook, secretary)—The regular December meeting was held in the society rooms in the Twohy Building. The following officers were elected for the ensuing year: President, F. C. Gerlach; first vice-president, F. S. Ryan; second vice-president, R. G. Reynolds; third vice-president, Jonas Clark; secretary, A. J. Baiocchi; treasurer, H. C. Brown.

SONOMA COUNTY

Sonoma County Medical Society (reported by N. Juell, secretary)—The society held its regular meeting January 11 at Sebastopol with very good attendance, five visitors being present. Howard C. Naffziger addressed the society on the subject of "Head and Nerve Lesions." Elizabeth Emerson was accepted as a new member and G. S. Holman was admitted to membership by transfer from San Leandro, Alameda County. James H. McLeod discussed with the society the business transacted by the Council of the State Society, which met in San Francisco on January 6. The Sonoma County Society unanimously endorsed the proposed change in the Indemnity Defense Fund.

BOOK REVIEWS

Psychoanalysis. Its theories and practical application. By A. A. Brill, Ph. D., M. D., 3rd ed. 468 pages. Philadelphia and London: W. B. Saunders Company, 1922.

Two diagnostic sins are almost unforgivable. One is to mistake neurosis for organic disease, the other to mistake organic disease for neurosis. In at least fifty per cent of cases as they come, the mental condition of the patient is of vital importance to both diagnosis and treatment. It ought to be trite to say that every medical man ought to be thoroughly acquainted with neuroses.

The volume named above is the third edition of an already standard work. No single book gives as clear and compendious a statement of pure Freudian psychopathology. Anyone who would understand the neuroses must begin with Freud and there is no better way than to read this work by Brill. Of course Freud was only the beginner and his work has been extended by a host of others, most particularly by Adler and Jung, and it is a pity that Brill barely mentions these two. If one were to depend solely upon Freud in treating the neuroses, without making any use of what these others have added, he would be riding a lame horse indeed.

The only essential change made since the second edition is the addition of chapters on Homosexuality and on Masterbation, both of which should be of great value to every reader. J. L. W.

The Practice of Medicine. By A. A. Stevens, M. D., Professor of Applied Therapeutics in the University of Pennsylvania; Professor of Therapeutics and Clinical Medicine in the Woman's Medical College of Pennsylvania. Octavo of 1106 pages. Philadelphia and London: M. B. Saunders Company, 1922. Cloth, \$7.50 net.

In the preface of this, the first edition, the author makes it his purpose to present descriptions of the various internal diseases which accord as nearly as possible with the present state of our knowledge and which, though concise, shall contain the necessary information upon etiology, morbid anatomy, symptomatology, diagnosis, prognosis and treatment of these diseases. It is not his intention to enter upon controversial fields but he has attempted to indicate these fields where they exist and has supplied references to the medical literature in which the two sides of a question may be read.

The book is undoubtedly a valuable addition to the library of any physician. Its contents are fully up to date and the pictures of disease presented are excellent. The general plan of the book is very similar to Osler's "Practice of Medicine" and is not profusely illustrated. Reproductions of temperature charts, polygraphic and electrocardiographic tracings are used where necessary, but no other illustrations are used excepting some anatomical diagrams in the section on diseases of the nervous system. References to articles containing extensive bibliographies are given where the author thinks necessary.

The book should prove a satisfactory textbook for students and certainly will be a valuable addition to the working library of the busy practitioner. T. H. K.

X-Ray Dosage in Treatment and Radiography. By William D. Witherbee, M. D., and John Remer, M. D. 87 pages. New York: The Macmillan Company, 1922. Price, \$1.75.

A handy little manual. It will be as useful to the radiologist as the dosage table of drugs is to the general practitioner. L. E.

Hughes' Practice of Medicine. Including a section on mental diseases and one on diseases of the skin. 12th ed. By R. J. E. Scott, M. A., B. C. L., M. D. Illustrated. 810 pages. Philadelphia: P. Blakiston's Son and Co., 1922. Price, \$4.

A useful little ready-reference manual for the office desk or the automobile side-pocket, even though the therapeutic recommendations have a flavor of antiquity that recalls flapping saddle-bags and smelly decoctions rather than automobiles and hypodermic syringes. For diabetes insipidus "Galvanism applying one pole to the neck below the occiput, the other to the hypochondriac region is of value." To aid digestion in chronic gastritis . . . "pepsin, pancreatin, papoid, and bitters are of value." Never mind—the little book has a lot of good in it. It will please many a faithful doctor, many a corner druggist, and many an old-fashioned lady. L. E.

Dental and Oral Radiography. A text-book for students and practitioners of dentistry. By James D. McCoy, M. S., D. D. S., F. A. C. D. Professor of orthodontia and radiography, College of Dentistry, University of Southern California, Los Angeles. 197 pages. 116 illustrations. 3d ed. St. Louis: C. V. Mosby Company, 1922. Price, \$3.

Two of the three chapters on the technic of dental and oral radiography and the chapter on the interpretation of dental and oral radiograms are useful. The remaining nine chapters deal with the history of the X-Ray, with high tension currents, magnetism and other similar things. They are out of place in a specialized manual. If they were left out and the book reduced by three-fourths, it would be more to the point and more serviceable. L. E.

Treatment of Fractures. With notes upon a few common dislocations. By Charles Locke Scudder, M. D. Ninth Revised edition. 749 pages. 1252 illustrations. Philadelphia and London: W. B. Saunders Company, 1922. Price, \$8.50.

To the ninth edition of this old stand-by are added many new methods (and old methods revised) brought out during the war, especially methods of traction and splinting. It is a perennially helpful and trustworthy guide. L. E.

BOOKS RECEIVED

A Manual of Gynecology. By John Osborn Polak, M. D., Professor of Obstetrics and Gynecology, Long Island College Hospital; Professor of Obstetrics in the Dartmouth Medical School; Gynecologist to the Jewish Hospital; Consulting Gynecologist to the Bushwick, Coney Island, Deaconess', and Williamsburgh Hospitals, Brooklyn, and the People's Hospital, New York. Second Edition, thoroughly revised. Illustrated with 139 engravings and 10 colored plates. Lea & Febiger, Philadelphia and New York, 1922.

Feeding, Diet and the General Care of Children. By Albert J. Bell, M. D., Assistant Professor of Pediatrics in the Medical Department of the University of Cincinnati; Attending Pediatrician to the Cincinnati General Hospital, The Tuberculosis Hospital and the Christ Hospital. Illustrated. A book for mothers and trained nurses. Philadelphia: F. A. Davis Company, 1923.

Principles and Practice of Infant Feeding. By Julius H. Hess, M. D., Professor and Head of the Department of Pediatrics, University of Illinois College of Medicine; Chief of Pediatric Staff, Cook County Hospital; Attending Pediatrician to Cook County, Michael Reese and Englewood Hospitals.

Illustrated. Third edition, revised and enlarged. Philadelphia: F. A. Davis Company, 1922.

Diseases of the Ear, Nose and Throat, Medical and Surgical. By Wendell Christopher Phillips, M.D., Professor of Otolaryngology, New York Post-Graduate Medical School and Hospital; Surgeon to Manhattan Eye, Ear and Throat Hospital; Attending Otolaryngologist to the Post-Graduate Hospital and Babies' Wards. Sixth Revised Edition. 578 illustrations. Philadelphia: F. A. Davis Company, 1922.

Montaigne and Medicine. Being the Essayist's comment on contemporary Physic and Physicians; his thoughts on many material matters relating to Life and Death; an account of his bodily Ailments and Peculiarities and of his Travel in Search of Health. By James Spottiswoode Taylor, Commander, Medical Corps, U. S. Navy, M.D., Paul B. Hoeber, New York, Publisher.

Pulmonary Tuberculosis. By Maurice Fishberg, M.D. Clinical Professor of Medicine, University and Bellevue Hospital Medical College; Chief of the Tuberculosis Service, Montefiore Hospital for Chronic Diseases, and of Bedford Hill Sanatorium for Incipient Tuberculosis. Third Edition, Revised and Enlarged. Illustrated with 129 engravings and 28 plates. Lea & Febiger, Philadelphia and New York, 1922.

Tuberculosis and the Community. By John B. Hawes, M.D., Director, Clinic for Pulmonary Diseases, and Assisting Visiting Physician, Massachusetts General Hospital; Instructor, Graduate School of Medicine, Harvard University; Consultant in Diseases of the Lungs, New England District U. S. Veterans' Bureau. Lea & Febiger, Philadelphia and New York, 1922.

Physical Exercises for Invalids and Convalescents. By Edward H. Ochsner, M.D., President Illinois State Charities Commission; Attending Surgeon, Augustana Hospital, Chicago. Second Edition. St. Louis: C. V. Mosby Company, 1922.

An Introduction to the Practice of Preventive Medicine. By J. G. Fitzgerald, M.D., Professor of Hygiene and Preventive Medicine and Director Connaught Antitoxin Laboratories, University of Toronto; assisted by Peter Gillespie, M.Sc., C.E., M.E.I.C., and H. M. Lancaster, B.A.Sc., both of the University of Toronto, with chapters and appendix articles by various contributors. St. Louis: C. V. Mosby Company, 1922.

A Textbook of Minor Surgery. By John C. Vaughan, M.D., Director and Visiting Surgeon Beekman Street Hospital; Visiting Surgeon Sing Sing Prison Hospital; Consulting Surgeon Manhattan Eye and Ear Hospital; Former Visiting Surgeon Bellevue Hospital and Chief Vanderbilt Surgical Clinic and Instructor in Minor Surgery, Columbia Medical College, and Athel Campbell Burnham, M.D., Colonel in United States Army, in charge of Red Cross in Poland; former Instructor in Surgery in the Polyclinic Hospital; Former Attending Surgeon Vanderbilt Clinic. 459 engravings. Lea & Febiger, Philadelphia and New York, 1922.

Textbook of Pediatrics. Edited by Professor E. Feer, Director of the University Children's Clinic, Zurich. Translated and edited by Julius Parker Sedgwick, B.S., M.D., Professor of Pediatrics, University of Minnesota Medical School and Carl Ahrendt Scherer, M.S., Duluth, Minnesota. 262 illustrations. Philadelphia and London: J. B. Lippincott Company.

A Manual of Clinical Diagnosis by Means of Laboratory Methods for Students, Hospital Physicians and Practitioners. By Charles E. Simon, M.D., Lecturer in Medical Zoology, School of Hygiene and Public Health of The Johns Hopkins University, formerly Professor of Clinical Pathology and Physiological Chemistry in the University of Maryland Medical School and the College of Physicians and Surgeons, Baltimore. Tenth Edition, enlarged and thoroughly revised. Illustrated with 233 engravings and 23 plates. Lea & Febiger, Philadelphia and New York.

Premature and Congenitally Diseased Infants. By Julius H. Hess, M.D., Professor and Head of the Division of Pediatrics, University of Illinois College of Medicine; Chief of Pediatric Staff, Cook County Hospital; Attending Pediatrician to Cook County, Michael Reese and Englewood Hospitals; Consulting Pediatrician, Municipal Contagious Hospital and Winfield Tuberculosis Sanatorium, Chicago; Member of Advisory Board Children's Bureau, Department of Labor, Washington, D.C. Illustrated with 189 engravings. Lea & Febiger, Philadelphia and New York, 1922.

A Manual of Diseases of the Nose and Throat. By Cornelius G. Coakley, A.M., M.D., Professor of Laryngology and Otolaryngology in the College of Physicians and Surgeons, Columbia University; Attending Surgeon, Bellevue Hospital; Consulting Laryngologist and Otolaryngologist to the Presbyterian Hospital. Sixth Edition, Revised and Enlarged. Illustrated with 145 engravings and 7 colored plates. Lea & Febiger, New York and Philadelphia, 1922.

Getting Ready to be a Mother. A little book of information and advice for the young woman who is looking forward to motherhood. By Carolyn Conant Van Blarcom, R.N., formerly Assistant Superintendent and Instructor in Obstetrical Nursing and the Care of Infants and Children at the Johns Hopkins Hospital Training School for Nurses. With an introduction by J. Clifton Edgar, M.D., and Frederick W. Rice, M.D. Seventy illustrations. New York: The Macmillan Company, 1922.

Medical Diagnosis for the Student and Practitioner. By Charles Lyman Greene, M.D., formerly Lecturer in Applied Anatomy, University of Minnesota; Professor of Applied Anatomy and Instructor in Clinical Medicine, etc., University Hospitals; Attending Physician, St. Luke's Hospital and Miller Hospital; Consulting Physician, State Hospital for Crippled and Deformed Children, etc. Fifth edition, revised and enlarged. 14 colored plates and 623 other illustrations. Philadelphia: P. Blackiston's Son & Co.

Need for and the Value of Medical Organization—The president of a state medical society, during his year of service as the head of the organization, gets an insight into many matters which otherwise he might not get. Even though he has not previously thought much about organization and the many problems of economic importance to the medical profession, the state association president, while he is president, has an experience that largely increases his knowledge of such matters and greatly widens his viewpoints. He comes to know, if he has not previously known, that medical organization is essential; he learns, if he has not previously found out, that it is much easier to talk than to do, much easier to tear down than to build up; he discovers during his year of service, if he has not discovered sooner, that many times the loudest talkers are the poorest doers, and that an occasional failure upon the part of those "in authority" has been due to no especial fault, but rather to uncontrollable conditions and circumstances.

Pharmacology and Therapeutics

COUNCIL ON PHARMACY AND CHEMISTRY OF THE A. M. A.

(Reported by W. A. Puckner, Secretary)

The December report of the Council on Pharmacy and Chemistry notices a number of new remedies admitted to New and Non-official Remedies, as well as some interesting data about other remedies:

Arsenobenzol-billon—Powers, Weightman, Rosengarten.

NEW AND NON-OFFICIAL REMEDIES

Mercurialized Serum-Lederle for Intravenous Injection—Each package contains the equivalent of 1-3 grain (0.022 Gm.) of mercuric chloride in 8 cc. normal horse serum. The initial dose is 1-12 grain of mercuric chloride. This may be gradually increased to 1-3 grain. For a discussion of the actions, uses and doses of mercurialized serum, see New and Non-Official Remedies, 1922, p. 189. Lederle Antitoxin Laboratories, New York.

Silvol—A brand of protargin mild—N. N. P. (See New and Non-official Remedies, 1922, p. 326.) Silvol is a compound of colloidal silver with an alkaline proteid and contains about 20 per cent of silver. Parke, Davis & Co., Detroit. (Jour. A. M. A., Dec. 9, 1922, p. 2001.)

Arsenobenzol-Billon—A brand of arsphenamine—N. N. R. For actions, uses and dosage, see New and Non-official Remedies, 1922, p. 43. Arsenobenzol-Billon is marketed in ampules containing, respectively, 0.1, 0.2, 0.3, 0.4, 0.5, and 0.6 Gm. of arsenobenzol-billon (Jour. A. M. A., Dec. 16, 1922, p. 2085).

PROPAGANDA FOR REFORM

More Misbranded Nostrums—The following products have been the subject of prosecution by the Federal authorities charged with the enforcement of the Food and Drug Act: Simmons' Cough Sirup (A. B. Richards Medicine Co.), consisting essentially of ammonium chlorid, glycerin, chloroform, vegetable extracts, alcohol, sugar and water, flavored with anise; Hobbs' Nerve Pills (Hobbs Spanish-American Medicine Co.), consisting essentially of powdered iron, quinin, licorice, starch and traces of arsenic and strychnin; Mando Tablets (Garcey's Drug Store), containing extracts of nux vomica and damiana; Castleberry's Sexual Pills (Allan-Pfeiffer Chemical Co.), consisting of an iron compound, extracts of Spanish fly and nux vomica, chalk and sugar; Fackler's Compound Extract of Damiana, consisting of extract of plant drugs, including nux vomica, damiana and saw palmetto and also extract of Spanish fly, sugar, alcohol and water. (Jour. A. M. A., Dec. 2, 1922, p. 1949.)

Silicon in Tuberculosis—In Germany the use of preparations of silicon in the treatment of tuberculosis has been proposed on the assertion that silica was found in calcified tuberculous lesions and lung stones and that, consequently, silicon, as well as calcium, is an important element in the formation of the beneficial scar tissues whereby the lesions are healed. However, Mayer and Wells, of the University of Chicago, find that the content of silica is no larger than one finds in comparable uncalcified tissues of adults. The use of silicon in therapy requires better evidence than is now available. (Jour. A. M. A., Dec. 2, 1922, p. 1935.)

More Misbranded Nostrums—The following products have been the subject of prosecution by the Federal authorities charged with the enforcement of the Food and Drug Act: Hebras Blood, Liver and Nerve Tonic (G. C. Bittner Co.), consisting essentially of epsom salt, a small amount of plant material, a trace of salicylic acid and water; Hull's Superlative Compound (A. J. Hull Medicine Co.), consisting essentially of extracts of plant drugs, including cinchona, a volatile oil, alcohol and water; Hull's

Superlative Liniment (A. J. Hull Medicine Co.), consisting of oils of cedar, thyme and probably wormwood, camphor and alcohol; Bristol's Sarsaparilla Compound (Lanman & Kemp, Inc.), consisting essentially of alcohol, sugar, potassium iodid and small amounts of extractives of vegetable drugs, including a laxative, and traces of a volatile oil; Kemp's Anacahuita Pectoral Compound (Lanman & Kemp, Inc.), consisting essentially of alcohol, sugar and small amounts of vegetable extractives, magnesium and ammonium salts. (Jour. A. M. A., Dec. 9, 1922, p. 2021.)

Neutral Acriflavine in Septicemia—Neutral acriflavine has been used intravenously in septicemia and similar conditions, but the available evidence does not demonstrate the value of the drug in these conditions. Also, the available evidence is insufficient to judge whether the intravenous use of the drug has dangers other than those inherent in intravenous medication. (Jour. A. M. A., Dec. 3, 1922, p. 2023.)

The Propaganda for Reform in Esthonia—Physicians the world over have long recognized that the claims for proprietary medicines put forward by those who are financially interested in sale are always over-optimistic, often unwarranted and not infrequently deliberately misleading and fraudulent. It is natural, therefore, that the widespread significance of the work of the Council on Pharmacy and Chemistry of the American Medical Association should have attracted the attention of the medical profession of all civilized countries and suggested the inaugurating of similar reform. An institute for drug control has been established in the Netherlands. Efforts toward the establishment of bodies patterned after the Council of Pharmacy and Chemistry have been reported in the past from Germany, Italy and Belgium. Now comes a message from Esthonia—formerly a Baltic province of Russia, but now an independent state—that the achievement of our Council is an incentive toward the inauguration of similar work in that country. (Jour. A. M. A., Dec. 9, 1922, p. 2030.)

"Esterol" Not Admitted to N. N. R.—"Esterol" is the proprietary and non-descriptive name under which the firm of Frederick Stearns & Co. markets benzyl succinate. Benzyl succinate has been admitted to New and Non-official Remedies. Its properties are similar to those of benzyl benzoate, but being insoluble it is almost tasteless and does not produce gastric discomfort. The Council on Pharmacy and Chemistry declared the proprietary brand of benzyl succinate sold as "Esterol" inadmissible because: (1) Stearns & Co. are neither the discoverers of the product nor of the therapeutic properties, and therefore are not entitled to apply a proprietary name to the product; (2) the labels of the trade packages contain recommendations for the use of esterol in dysmenorrhea, asthma, colic, hiccup and thus advertise it indirectly to the public. (Jour. A. M. A., Dec. 16, 1922, p. 2102.)

Cluttering Up Pharmaceutical Nomenclature—Esterol is Frederick Stearns & Co.'s proprietary name for benzyl succinate. The product per se is unobjectionable. The fundamental objection to esterol and the chief reason for its non-admission to New and Non-official Remedies is its name. A multiplicity of names for any one medicinal substance is against the interests, not only of scientific prescribing, but also of public welfare. When acetanilid was first introduced under a thousand and one names, cases were reported in medical literature of physicians calling for acetanilid under two or more names in the same prescription. More recently there was the ridiculous duplication of names for hexamethylenamin. Later yet came the even greater duplication in the case of phenolphthalein. Had Stearns & Co. been content to market their brand of benzyl succinate as benzyl succinate-Stearns, the product, as far as the name is concerned, would have been acceptable for New and Non-official Remedies. Such a name would give the firm any legitimate protection which it should desire and at the same time

give physicians full information about its composition. (Jour. A. M. A., Dec. 16, 1922, p. 2090.)

More Misbranded Nostrums—The following products have been the subject of prosecution by the Federal authorities charged with the enforcement of the Food and Drugs Act: Allen's Ulcerine Salve (J. P. Allen Medicine Co.), consisting essentially of lead soap and linseed oil; Ward's Celebrated Liniment (Dr. Ward's Medical Co.), consisting of alcohol, soap, sassafras oil, extract of red pepper and colored water; Ward's Lung Balsam (Dr. Ward's Medical Co.), consisting of chloroform, menthol, tar, ipecac extract, ammonium chlorid, sugar, alcohol and colored water; Ward's Kidney and Bladder Remedy (Dr. Ward's Medical Co.), consisting of extract of bearberry and cascara sagrada, sodium phosphate, sodium acetate, alcohol and water sweetened with saccharin and flavored with lemon oil; Ward's Sarsaparilla Compound (Dr. Ward's Medical Co.), consisting of sarsaparilla extract, anise oil, sassafras oil, a trace of potassium iodid, alcohol and colored water; Ward's Kidney and Backache Pills (Dr. Ward's Medical Co.), consisting of methylene blue, bearberry, digitalis, aleos, a trace of buchu and an aromatic oil; Durand's Swiss Herb Tea (Durand Medicine Co.), consisting of a mixture of plant drugs, including senna, fennel seed, orange peel, licorice root, juniper berries, althea root, sassafras bark, lavender flowers, buckthorn bark, red clover tops and saffron.

Ferraline (Ferraline Medicine Co.), consisting essentially of iron sulphate with other iron compounds and water; Crab Orchard Mineral Water (L. H. Goodwin & Co.), a highly mineralized water, the dissolved mineral matter consisting chiefly of Glauber's and Epsom salts (Jour. A. M. A., Dec. 16, 1922, p. 2103).

Absorbine Jr.—A liniment almost identical in physical appearance may be made from the following formula: Oil of wormwood, 1 dram; oil of sassafras, 26 minims; menthol, 15 grains; acetone, sufficient to make 11 drams (Jour. A. M. A., Dec. 23, 1922, p. 2184).

Collene Not Acceptable for N. N. R.—Collene (Collene Laboratories, Inc., New York) is said to be a solution in distilled water of 0.05 per cent of colloidal silver in the metallic state. Many sweeping statements are made of superiority and therapeutic value of collene, but they are based on no adequate evidence. Aside from the general misleading tenor of the advertising, the Council on Pharmacy and Chemistry found, when it took up the consideration of collene, discrepancies between facts and claims. The Collene Laboratories claimed 0.05 per cent of colloidal silver, while the Council's examination showed that, in effect, the silver content of collene was not colloidal, but ionic. The ionic content of collene indicates that the antiseptic effect of collene is of similar origin to that of silver nitrate and not to its alleged colloidal nature. In view of the ionic silver present, the claimed non-toxic effects are inherently improbable.

Instead of being acid free, as claimed, collene has a slight acidity and this may be responsible for its irritant effects on sensitive tissues. The Council declared collene not acceptable for New and Non-official Remedies because its composition is not correctly declared and because of the extravagant and misleading tenor of the advertising (Jour. A. M. A., Dec. 23, 1922, p. 2181).

More Misbranded Nostrums—The following products have been the subject of prosecution by the Federal authorities charged with the enforcement of the Food and Drugs Act: Lungardia (Lungardia Co.), consisting essentially of kerosene oil, turpentine oil, cassia oil, clove oil, extract from a laxative plant drug, sugar, gum, alcohol and water; Garrin's Blood Purifier and Tonic (Garrin Medicine Co. and Asheville Medicine Co.), consisting essentially of alcohol, glycerin, sodium benzoate and water with extracts of plant drugs, including golden seal; Deer Lick Spring Water (California Medicinal Springs

Co.), water containing mineral matter consisting chiefly of chlorids of sodium, magnesium and calcium, sulphate and bicarbonate of calcium, and sulphid of sodium; Lee's Hazel Antiseptic Cones (Hazel Hygienic Co.), perfumed suppositories composed of boric acid, sodium salicylate, a trace of zinc salt and cacao butter (Jour. A. M. A., Dec. 23, 1922, p. 2182).

Hayes Asthma Remedy—This preparation is exploited by P. Harold Hayes, Buffalo, N. Y. Some years ago, six of the seven remedies were examined. The analysts reported one, a cough medicine, to contain oils of turpentine, peppermint, etc., emulsified and sweetened. A second contained potassium iodid. A third preparation was reported to contain potassium, sodium and ammonium iodid. A fourth preparation contained iron peptonate. A fifth preparation consisted of capsules containing quinin sulphate. A sixth preparation consisted of pills which contained as their active constituent resin of jalap (Jour. A. M. A., Dec. 30, 1922, p. 2248).

Two Electronic Diagnoses of Abrams—Instead of the blood of a patient, a physician sent the blood of a guinea pig to one J. W. Eisminger, of Oklahoma City, who operates a physico-chemical laboratory for the electronic reactions of Abrams. Eisminger is an osteopath. The report received by the physician on the patient, whose history was sent in, reads as follows:

"Congenital diminished resistance, cerebro-spinal and digestive strain, 39 ohms. Metastatic Carcinoma, 6 Liver and right colon, Tuberculosis Genito-urinary tract, 6 ohms. Colisepsis, 4 ohms. Streptococci, infection, 12-25 ohms. in gall bladder region."

Another physician states that he sent Eisminger some sheep's blood on blotting paper with a blank supposedly for a 15-year-old boy. This physician received the following diagnosis:

"Congenital diminished resistance cerebro-spinal strain 38 ohms. Metastatic carcinoma of left lung and pancreas, 8 ohms. Neisserian infection genito-urinary tract, eyes, 4 ohms. Tuberculosis of genito-urinary tract, 4 ohms."

However, it is possible that these blood specimens were not taken in subdued light and that Eisminger was not informed if the subjects had red hair nor of their religious faith—factors which are said to play an important part in diagnoses made by the Abrams method (Jour. A. M. A., Dec. 30, 1922, p. 2247).

Nuforal—This number of the Journal carries an article by William C. Voorsanger on "Tuberculosis." Among other methods of treatment having a certain amount of following mentioned by Dr. Voorsanger is that of Nuforal. It is the purpose of this note to call to the attention of the members of the medical profession the fact that Nuforal has not been accepted by the Council on Pharmacy and Chemistry of the A. M. A. Physicians interested in data, in addition to that published in current medical Journals, regarding this alleged remedy of tuberculosis are advised to correspond with the secretary of the Council on Pharmacy and Chemistry of the A. M. A.

AGAIN "PROPRIETARY MEDICINES AND THE DOCTOR"

Twice recently we have called attention to the way in which the mails of physicians, and both medical and lay editors have been flooded with reprints of a paper by one Irwin G. Jennings, who was giving "Vital Reasons Why the Medical Profession and the Medicine Man Should Pool Their Ideals and Work Together to Benefit Humanity." The paper in question appeared originally in the official organ of the Glass Container Association which, of course, is interested in the bottle business. The author of the paper was described as a "judge" and a "lawyer," although the fact was not brought out that he was the editor of the Glass Container.

MEDICAL ECONOMICS

Why not let our advertisers help you?

Aid to a State Medical Journal—The St. Joseph's Hospital staff organization, Bloomington, Ill., has passed a resolution setting forth an agreement to purchase supplies and equipment of advertisers in the Illinois Medical Journal.

Stanford Medical School Offers Special Work to Physicians—The attention of readers of the Journal is called to the card from Stanford Medical School in the advertising columns of this issue. This offer of graduate instruction by an accredited institution of learning constitutes the first step toward the accomplishment of a very necessary and worthwhile service. Many physicians who are located away from the centers of medical education and research undoubtedly will avail themselves of the opportunity to spend a limited period of time in the departments of instruction in which they are most interested. A few weeks of this kind of intensive application to review of medicine in association with those whose business it is to teach will prove of immense value not only to physicians themselves but to the community as a whole.

Orthopedic Appliances Service Changes Offices—It will be noticed in the card carried by E. H. Markel & Company, Orthopedic Appliances, that they have moved from 1138 Mission street to 546 Jones street. This company deals in all forms of mechanical orthopedic appliances. They have recently enlarged the firm by the addition of more skilled workers.

Insurance—In these days when the insurance companies are offering the greatest varieties of protection to individuals or organizations, it is well for the physician to think seriously of his own protection and the protection of his family.

Some companies insure the fingers of a famous violinist or the feet of Charlie Chaplin. Others will protect a baseball club if the home-run king is indisposed, or in a world series will insure the club from loss due to the elements. Automobiles and their owners may be protected from fire, theft or accident to themselves or to others.

The physician should be cognizant of the value and the necessity of protecting himself and his family. Every physician, as an examiner, has had occasion to reject some man because he neglected to consider insurance until the strain of modern life had forced his blood pressure above normal limits, had brought albumin or sugar in his urine, or had developed in his heart either a murmur or an irregularity.

With these cases constantly recurring, the physician should be foresighted, especially when he realizes that his income is entirely dependent on his own efforts. Too often, however, is the story told of this physician who develops some acute condition that carries him off, leaving his widow with but little resources outside of the bills, which, if he lived, would have been paid, but which, after his death, are forgotten or disputed by the one-time grateful patients.—Editorial, Rhode Island Medical Journal, January, 1923.

Popular Medical Lectures—Stanford University Medical School announces the annual series of popular medical lectures to be held in Lane Hall, Sacramento Street near Webster, as follows:

"The Problem of the Delinquent Child," by Mr. J. C. Astredo, February 9.

"The Care of the Dependent Child," by Miss Katherine Felton, February 23.

"Modern Views on Dental Hygiene in Childhood," by Guy S. Millberry, D. D. S., March 9.

San Francisco's Health Program for Children: "The Medical Aspects," by William C. Hassler, M. D.

"The Educational Aspects," by Mrs. C. W. Hetherington.

DEATHS

Craig Thornton. Died at Woodland, December 20, 1922, age 77. He was a graduate of McGill University, Montreal, and came to Yolo County to begin his practice. He was a member of the Yolo County Medical Society, the State Medical Society and the American Medical Association.

Dozier, William E. Died at Susanville, Lassen County in November, 1922, age 58. He graduated from the Medical Department of the University of Virginia in 1883 and was licensed in the State of California in 1884. Doctor Dozier was a member of the Lassen County Medical Society, the State Medical Society and the American Medical Association.

Hitchcock, William Wesley. Died at Los Angeles, December 17, 1922, age 68. He was a graduate of Rush Medical College, Chicago, 1879 and the Bellevue Hospital Medical College, 1881. Licensed in California in 1887. Doctor Hitchcock retired from practice ten years ago to become the medical director of the Occidental Life Insurance Company. He was a member of the Los Angeles County Medical Society, the State Medical Society and the American Medical Association.

Hollis, John Claude. Died at Oakland, December 20, 1922, age 42. He was a graduate of the University of Illinois, taking a post graduate course at the University of London in 1914. Doctor Hollis spent several years in the practice of medicine in Cuba, coming to Pleasanton, California, in 1918 where he remained until 1921, at which time he located in Oakland. He was a member of the Alameda County Medical Society, the State Medical Society, the Cuban National Medical Association and the American Medical Association.

Huff, Samuel Gaston. Died at Santa Ana, December 16, 1922, aged 78. Graduate of St. Louis Medical College 1870. He practiced in Nebraska until 1880, then came to San Bernardino, where he became one of the valley's well known physicians, and in 1897 was placed at the head of the County Hospital, continuing in that position until his retirement about 15 years ago, when he moved to Huntington Beach. He was a member of the American Medical Association.

Robinson, Louis Sydney. Died at San Diego, December 17, 1922, aged 49. Graduate of the Medical School of Harvard University, 1901. Doctor Robinson came to San Diego on sick leave last June from Fort Bayard, New Mexico. He was an authority on tuberculosis and held the rank of major in the United States Public Health Service. He was a member of the Colorado State Medical Society and the American Medical Association.

Brooke, Sarah. Died at Atascadero, January 4, 1923, aged 80. Graduate of Woman's Medical College of Pennsylvania, Philadelphia, 1874. She retired from practice several years ago, coming to Atascadero, where she made her home. Dr. Brooke was a member of the American Medical Association.

Dake, Walter Marshall. Died at San Diego, December 16, 1922, aged 67. He was a graduate of Hahnemann Medical College and Hospital of Philadelphia, 1877. Dr. Dake came to California from Denver, where he had been in the practice of medicine for a number of years. He was a member of the Colorado State Medical Society and the American Medical Association.

Goodspeed, Isaac R. Died at San Mateo, December 28, 1922, aged 91. Graduate of Bowdoin Medical School, Portland, Maine, 1854. He was licensed in California in 1876 and a member of the American Medical Association.